

Flourishing of Teachers in Secondary Schools

Johannes Jacobus (Kleinjan) Redelinghuys, MCom (Industrial Psychology)

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Promoter: Prof. S. Rothmann

Co-promoter: Dr E. Botha

Vanderbijlpark

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PREFACE AND DECLARATION

This study is presented in article format. The researcher, Kleinjan Redelinghuys, conducted the research and wrote the manuscripts. Prof. Sebastiaan Rothmann acted as promoter and Dr. Elrie Botha as co-promoter. The three manuscripts will be submitted for publication.

The reader is reminded of the following:

- The references as well as the editorial style as prescribed by the *Publication Manual* (6th edition) of the American Psychological Association (APA) were followed in this thesis.

I, Kleinjan Redelinghuys, herewith declare that “Flourishing of teachers in secondary schools” is my work and that all the sources that I have used or quoted are indicated and acknowledged using complete references.

ACKNOWLEDGEMENTS

I am ecstatic to announce that, after two years, I can finally conclude my thesis. This has been an invaluable experience and I am most grateful to all the people who contributed towards my experience in a unique manner. I would like to express my utmost gratitude towards the following people and entities:

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SUMMARY

Title: Flourishing of teachers in secondary schools.

Keywords: Workplace flourishing, emotional well-being, psychological well-being, social well-being, person-environment fit, in-role performance, intention to leave, organisational citizenship behaviour, positive practices.

Quality education plays a pivotal role in developing the South African economy. This requires a motivated, healthy, committed, competent, and well-functioning teacher corps. Unfortunately, relatively little is known about the work and career features essential for flourishing, as previous studies mainly focused on isolated accounts of well-being. Ill consideration of the multidimensionality of work-related well-being could be harmful to the long-term well-being of employees. Research is needed with regard to the antecedents and outcomes of workplace flourishing from a cross-sectional and longitudinal perspective, especially as commonly cited problems in the South African educational sector include high attrition rates, teacher shortages, and low teacher performance.

The aim of this study was to investigate antecedents, outcomes, and organisational factors associated with workplace flourishing. In cross-sectional studies 1 and 2, a stratified random sample ($N = 258$) was taken of teachers from secondary schools in the Sedibeng East and West District in Gauteng. In study 3, a longitudinal design was used with participants who responded to a second wave of the research (and $N = 201$). Instruments measuring workplace flourishing (i.e. emotional well-being, psychological well-being, and social well-being), person-environment fit (i.e. person-organisation fit, needs-supplies fit, demands-abilities fit), in-role performance, intention to leave, organisational citizenship behaviour (i.e. assistance to co-workers and the organisation), and positive practices (i.e. caring, compassionate support, forgiveness, inspiration, meaning, as well as respect, integrity, and gratitude) were used.

The results of study 1 confirmed the construct validity and the internal consistencies of the Flourishing-at-Work Scale (FAWS). Flourishing at work consisted of emotional well-being (job satisfaction, positive affect and low negative affect), psychological well-being (autonomy satisfaction, competence satisfaction, relatedness satisfaction, meaning, engagement and learning), and social well-being (social contribution, social integration,

social actualisation, social acceptance and social coherence). The results showed that all three dimensions of person-environment fit positively predicted workplace flourishing. Workplace flourishing negatively predicted intention to leave, and positively predicted in-role performance and organisational citizenship behaviour. Person-environment fit did not have an indirect effect on intention to leave via workplace flourishing. However, person-environment fit did have an indirect effect on in-role performance and organisational citizenship behaviour via workplace flourishing.

Study 2 showed acceptable psychometric properties for the 17-item Flourishing-at-Work – Short Form (FAWS-SF). Workplace flourishing is a three-factor construct consisting of emotional well-being (job satisfaction and positive affect), psychological well-being (autonomy satisfaction, competence satisfaction, relatedness satisfaction, meaningful work, engagement and learning), and social well-being (social contribution, social integration, social actualisation, social acceptance and social coherence). Furthermore, the FAWS-SF demonstrated good internal consistencies (full scale = 0.92; EWB = 0.81; PWB = 0.85; SWB = 0.86). Workplace flourishing was negatively related to intention to leave, and positively related to in-role performance and organisational citizenship behaviour. A total of 44.19% of the population flourished, while 49.22% were moderately mentally healthy, and 6.59% languished. Positive organisational practices were associated with flourishing at work.

Study 3 showed that the measuring instruments used in the study were reliable and invariant. All of the measuring instruments demonstrated strong configural (same factor structure across times), metric (same factor loadings across times), and scalar (same item intercepts across times) invariance. Furthermore, each scale had good test-retest reliability: needs-supplies fit, emotional well-being, psychological well-being, social well-being, and intention to leave. Results from the cross-lagged structural model showed a statistically significant and positive causal relationship between needs-supplies fit and workplace flourishing. It was concluded that needs-supplies fit (as a dimension of person-environment fit) eventually leads to workplace flourishing, which strengthens needs-supplies fit in the longer term. No significant causal relationships were found between needs-supplies fit and intention to leave, as well as between workplace flourishing and intention to leave.

Recommendations for future research were made.

TABLE OF CONTENTS

	Page
Preface and Declaration	i
Acknowledgements	ii
Summary	iii
List of Figures	vii
List of Tables	viii
CHAPTER 1: INTRODUCTION	
1.1 Background and motivation of the research	1
1.2 Problem statement	3
1.3 Research objectives	8
1.3.1 General aim	8
1.3.2 Specific objectives	8
1.4 Research method	8
1.4.1 Research design	8
1.4.2 Participants	9
1.4.3 Measuring instruments	9
1.4.4 Research procedure	13
1.4.5 Statistical analysis	13
1.5 Ethical considerations	15
1.6 Chapter layout	15
References	16
CHAPTER 2: RESEARCH ARTICLE 1	22
CHAPTER 3: RESEARCH ARTICLE 2	61
CHAPTER 4: RESEARCH ARTICLE 3	93

TABLE OF CONTENTS (continued)

CHAPTER 5: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS		Page
5.1.	Conclusions	120
5.2	Integration and contribution of this study	129
5.3	Limitations	130
5.4	Recommendations	131
5.4.1	Recommendations to solve the research problem	131
5.4.2	Recommendation for future research	132
	References	133

LIST OF FIGURES

Figure	Description	Page
Research article 1		
Figure 1	The structural model – standardised solution with standard errors in parentheses	47
Research article 2		
Figure 1	Mean frequencies on dimensions of workplace flourishing	81
Figure 2	The structural model – standardised solution with standard errors in parentheses	82
Research article 3		
Figure 1	The cross-lagged structural model	108

LIST OF TABLES

Table	Description	Page
Research article 1		
Table 1	Characteristics of the participants	36
Table 2	Characteristics of the participants	37
Table 3	Goodness-of-fit statistics of competing measurement models	43
Table 4	Descriptive statistics, reliabilities and correlation coefficients	45
Table 5	Goodness-of-fit statistics of competing structural models	46
Table 6	Difference testing for competing structural models	46
Table 7	Indirect effect of person-environment fit on intention to leave, in-role performance, and organisational citizenship behaviour via workplace flourishing	48
Research article 2		
Table 1	Flourishing at work	65
Table 2	Positive practices	69
Table 3	Characteristics of the participants	72
Table 4	Goodness-of-fit statistics of competing measurement models	78
Table 5	Descriptive statistics, reliabilities and correlation coefficients	80
Table 6	Prevalence of workplace flourishing	82
Table 7	MANOVA – Differences between the levels of workplace flourishing and positive practices	83
Research article 3		
Table 1	Configural, metric, and scalar invariance	104
Table 2	Comparison of configural, metric, and scalar models	105
Table 3	Descriptive statistics, reliabilities and correlation coefficients	107

CHAPTER 1

INTRODUCTION

This thesis focuses on the flourishing of teachers in secondary schools.

This chapter contains the problem statement and the discussion of the research objectives (including the general and specific objectives). Furthermore, the research method is explained and the division of the chapters is given.

1.1 BACKGROUND AND MOTIVATION FOR THE RESEARCH

Quality education plays a pivotal role in developing the South African economy (Jackson, Rothmann, & Van de Vijver, 2006). This requires a motivated, healthy, committed, competent, and well-functioning teachers' corps (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Louw, George, & Esterhuyse, 2011). Although studies (e.g. Jackson et al., 2006; Ngidi & Sibaya, 2002; Peltzer, Shisana, Zuma, Van Wyk, & Zungu-Dirwayi, 2009) have been conducted regarding the well-being of teachers, most studies focused on the negative aspects associated with teacher functioning (e.g. stress and burnout). It would be logical to investigate what is 'right' about people to expand our knowledge about what we already know is 'wrong' (Seligman, Steen, Park, & Peterson, 2005). Therefore, it is crucial to add to existing literature that focused on the positive functioning of teachers, such as positive affect, prosocial relationships, and self-efficacy (e.g. Pas, Bradshaw, & Hershfeldt, 2012; Van Horn, Taris, Schaufeli, & Schreurs, 2004). These studies, however, focused on separate accounts of well-being, not taking into account the multidimensionality of well-being, e.g. workplace flourishing (emotional, psychological, and social well-being).

The examination of well-being has been of paramount importance dating back to the writings of ancient Greek philosophers (Keyes, 2006). The promotion of well-being is of particular importance for developing or emerging countries (Farid & Lazarus, 2008). Although extensive research exists with regard to well-being, numerous studies have focused on the psychopathological aspects thereof. Turner, Barling, and Zacharatos (2002) proposed the extension of research to explore more comprehensively the positive sides of work, as Dunn

and Dougherty (2008) state: “as a society, we need to know how people can flourish” (p. 314). Unfortunately, relatively little is known about the work and career features essential for flourishing (Kidd, 2008). Therefore, it is vital to investigate the factors associated with workplace flourishing to add to its thin, yet promising literature base. To date, research across various industries has consistently indicated that less than half of the population flourishes at work. This warrants further investigation into the underlying mechanisms that influences workplace flourishing, to more accurately explain the factors that may impede or facilitate emotional, psychological, and social well-being in the workplace.

Flourishing has been subjected to numerous conceptualisations. According to Seligman’s (2011) PERMA model, five states are associated with flourishing, namely positive emotion (P), engagement (E), positive relationships (R), meaning (M), and accomplishment (A). Similarly, Huppert and So (2013) acknowledged positive emotion, engagement, meaning, and positive relations in their model of flourishing. However, they built a larger model to include aspects such as satisfaction with life, competence, resilience, vitality, optimism, self-esteem, and emotional stability. However, these models focused on flourishing in general, which refers to flourishing in everyday life outside of work. In an attempt to measure flourishing in the work context, Bono, Davies, and Rasch (2012) included aspects such as job satisfaction, positive emotion, engagement, self-determination, and learning. Although each model has been valuable, they predominantly focus on the emotional and psychological aspects of flourishing, while ignoring the social aspects.

In order to address the preceding gap, Keyes (2002) deviated from popular belief that the absence of mental illness equates to an individual being mentally healthy. He developed a comprehensive three-factor model of flourishing, building on studies conducted by Diener, Suh, Lucas, and Smith (1999) who primarily focused on emotional well-being; Ryff (1989) who distinguished between emotional and psychological well-being; as well as studies conducted by himself focusing on social well-being (Keyes, 1998). As a result, Keyes (2002) combined emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB) as criteria for people to flourish in general life. Flourishing, however, also occurs in work and organisational contexts (Rothmann, 2013). Building on the study of Keyes (2002), Rothmann (2013) developed a model of flourishing at work, acknowledging that flourishing is a multidimensional construct consisting of EWB, PWB, and SWB. Although flourishing in the work context and flourishing in general shared 54% of the

variance, he found that flourishing in the work context was better predicted by job-contextual factors, and that it also predicted organisational outcomes better than flourishing in general.

Good quality measures are a prerequisite for the scientific study of flourishing in the workplace (Huppert & So, 2013; Rothmann, 2013). As workplace flourishing is new to the area of measurement, it is important to further examine the psychometric properties of a long and short form of the Flourishing-at-Work Scale, to ensure that valid and reliable inferences can be made across various industries and population groups. When organisations are aware of the factors that impede the well-being of their employees, they can more purposefully direct interventions at the identified problems. Similarly, when organisations are aware of the factors that promote well-being among employees, they can more purposefully develop policies and procedures to foster health promotion. Valid and reliable information regarding the holistic well-being of employees could enable organisations to effectively manage employee health and functioning, which should pave the way for organisational excellence.

1.2 PROBLEM STATEMENT

By just working as a teacher, one may be more inclined to experience ill health (Jackson et al., 2006), as education ranks among the top ten most stressful and toughest occupations (Hayward, 2009; Kyriacou, 2001). Teachers are faced with a wide array of challenging demands, including difficult parent interactions, negative work environments, insufficient remuneration, unfulfilled interpersonal relationships with colleagues, and ever-increasing administrative burdens (Clunies-Ross, Little, & Kienhuis, 2008; Jackson et al., 2006; Klassen, Usher, & Bong, 2010). Despite these demands, teachers are often so entangled with the difficulties experienced by learners that the development of their strengths and qualities are side-lined (Hammett & Staeheli, 2009). This is problematic as the enhancement of positive attributes and strengths of teachers promises positive outcomes for all stakeholders (Luthans, Norman, Avolio, & Avey, 2008). Therefore, steps should be taken to ensure that they are healthy and functioning well at work.

Flourishing at work is defined as an employee's desirable condition or state of well-being, achieved through positive experiences and effective management of work-related factors (Rautenbach & Rothmann, in press-a). When employees flourish, they display a wide range

of positive work-related attitudes. They derive a sense of satisfaction from their jobs and experience frequent positive affect. They experience a sense of freedom and choice when carrying out tasks, effectively deal with their environment, and feel connected to others. Finding their work meaningful and purposeful, they find themselves learning often. They are emotionally, cognitively, and physically engaged in their work. Furthermore, when employees flourish, they believe that they are valuable organisational members, illustrating positive attitudes towards the potential and diversity of others. They experience a sense of comfort and support, finding the organisation and social relationships at work both meaningful and comprehensible.

Although previous studies have examined antecedents of workplace flourishing, its relationship with one of the most consistent predictors of individual and organisational outcomes in social research, namely person-environment (PE) fit, is yet to be examined. PE fit, one of the most central concepts in the field of work-related behaviour (Schneider, 2001), refers to the perceived congruence between employees and aspects of the work environment. Three dimensions constitute PE fit, namely person-organisation (PO) fit (the perceived congruence between employee and organisational values), demands-abilities (DA) fit (the perceived congruence between job demands and the possessed abilities of employees), and needs-supplies (NS) fit (the perceived congruence between job rewards and employee needs) (Cable & DeRue, 2002). When people experience fit with their environment, they experience job satisfaction (Cable & DeRue, 2002), positive affect (Gabriel, Diefendorff, Chandler, Moran, & Greguras 2014), meaningful work (Duffy, Autin, & Bott, 2015; Kahn, 1990; Shamir, 1991), psychological need satisfaction (Greguras & Diefendorff, 2009), work engagement (Chen, Yen, & Tsai, 2014), as well as psychological empowerment (Gregory, Albritton, & Osmonbekov, 2010), which consists of meaning, competence, self-determination, and impact (Spreitzer, 1995). Payne (1981) also suggested that a degree of misfit may lead to a certain level of stress or challenge which encourages learning and development.

The prevalence of positive mental health has been less satisfactory, drawing from studies conducted in the United States of America (Keyes, 2002; Keyes, Dhingra, & Simoes, 2010) and South Africa (Diedericks & Rothmann, 2014; Khumalo, Temane, & Wissing, 2012; Swart & Rothmann, 2012). Therefore, it is vital to investigate the factors associated with

workplace flourishing and outcomes such as intention to leave and performance, to illustrate the importance of managing work-related well-being.

No previous studies have examined outcomes in relation to workplace flourishing as modelled by Rautenbach and Rothmann (in press-b). This warrants the investigation of outcomes related to workplace flourishing, to emphasise the benefits of flourishing or the consequences of languishing in the workplace. The current study assessed intention to leave, in-role performance, and organisational citizenship behaviour (OCB) as outcomes. These are important outcomes as performance and employee retention form the backbone of organisational performance and effectiveness.

Intention to leave refers to an employee's cognisant and intentional frame of mind to part ways with his or her respective organisation (Tett & Meyer, 1993). *In-role performance* refers to the activities an employee is expected to fulfil as stipulated in his or her formal job requirements (Borman & Motowidlo, 1997; Williams & Anderson, 1991). *OCB* refers to employee behaviour that contributes beyond what is expected in the basic job requirements (Lambert, 2006). When employees flourish, they are less likely to contemplate leaving the organisation, and they perform better (Diedericks & Rothmann, 2014; Rothmann, 2013).

Furthermore, no previous studies have examined the full spectrum of positive practices in relation to workplace flourishing. Assessing positive practices is important as organisational practices have been shown to affect individual well-being (Gittell, Cameron, Lim, & Rivas, 2006). Unfortunately, previous studies have only assessed isolated accounts of flourishing and positive practices which only partly explain how these constructs relate to one another. The concept of positive organisational practices stems from positive organisational scholarship (POS) – which strives to uncover which positive capabilities and activities could lead to flourishing in organisational contexts (Cameron, Dutton, & Quinn, 2003). Practices refer to collective behaviours or activities which are advocated by and characteristic of an organisation (Cameron, Mora, Leutscher, & Calarco, 2011). They do not represent emotions or climate, but rather assume a behavioural orientation (Cameron et al., 2011). The list of positive practices was not derived from overarching theory, but rather selected based on their appearance in previous research, their representation of behavioural practices or activities, and their possession of at least one of the three connotations of positive deviance, virtuous practices and/or affirmative bias (Cameron et al., 2011). Consequently, six dimensions of

positive practices emerged, namely caring, compassionate support, forgiveness, inspiration, meaning, as well as respect, integrity, and gratitude (Cameron et al., 2011).

To date, no research has focused on the longitudinal analysis of workplace flourishing. This is problematic as workplace flourishing is not a fixed state (Rautenbach & Rothmann, in press-a). Although some longitudinal studies exist regarding dimensions of person-environment (PE) fit and dimensions of workplace flourishing (De Beer, Rothmann, & Mostert, 2016; Gabriel, Diefendorff, Chandler, Moran, & Greguras, 2014; Lu, Wang, Lu, Du, & Bakker, 2014), none of these studies have taken into consideration the multidimensionality of work-related well-being. Ill consideration of the multidimensionality of work-related well-being could be harmful to the long-term health of employees (Porath, Spreitzer, Gibson, & Garnett, 2012). Furthermore, no previous studies have investigated the relationships between needs-supplies fit, workplace flourishing, and intention to leave. Gaining insight into the most influential causes of employees' intent to leave can assist organisations to adopt more effective retention strategies to retain talented employees. This information could be helpful for the educational sector in South Africa, where commonly cited problems include high attrition rates (Steyn, 2006), teacher shortages (Xaba, 2011), and low teacher performance (Jackson & Rothmann, 2006).

Specific Research Problems

Based on the preceding discussion, the following research problems were identified: Although the concept of flourishing in general life has received a substantial amount of research attention, empirical studies regarding workplace flourishing is still in its infancy stage. First, this requires further investigation into the psychometric properties of both forms of the Flourishing-at-Work Scale (FAWS; Rautenbach & Rothmann, in press-b). Second, further information is required regarding antecedents of workplace flourishing. Although previous studies (Rautenbach & Rothmann, in press-a) have focused on antecedents, the impact of PE fit has not been examined yet. Third, scientific information is needed regarding the outcomes of workplace flourishing as modelled by Rautenbach and Rothmann (in press-b). Fourth, further information is required regarding the impact of the full spectrum of positive practices on employee flourishing. Fifth, scientific information is needed regarding

the relationship between needs-supplies fit, workplace flourishing, and intention to leave over an extended period.

The *main research question* of this study was:

What are the antecedents, outcomes, and organisational factors associated with workplace flourishing, and how do PE fit, workplace flourishing and intention to leave relate over time?

The following more *specific research questions* were posited:

- Are both forms of the FAWS valid and reliable instruments in the context of teaching?
- Are teachers in the Sedibeng East and West District flourishing?
- What is the relationship between workplace flourishing, PE fit, in-role performance, intention to leave, and OCB?
- What is the relationship between workplace flourishing (as measured by the FAWS-SF), in-role performance, intention to leave, and OCB?
- What are the effects of positive practices on workplace flourishing?
- How do needs-supplies fit, workplace flourishing and intention to leave relate over time?

This study will contribute to the field of Industrial/Organisational Psychology in the following ways: Firstly, it will result in the further validation of an instrument that measures flourishing versus languishing in the workplace. Secondly, it will result in the discovery of the role of a new antecedent of workplace flourishing, namely person-environment (PE) fit. Thirdly, it will result in the first discovery of outcomes (intention to leave, in-role performance, and OCB) related to flourishing at work as modelled by Rautenbach and Rothmann (in press-b). Fourthly, it will result in more comprehensive information regarding the impact of positive practices on workplace flourishing. Lastly, it will result in the first longitudinal study that measures needs-supplies, workplace flourishing, and intention to leave.

1.3 RESEARCH OBJECTIVES

1.3.1 General Aim

The general aim of this study was to assess antecedents, outcomes, and organisational factors associated with workplace flourishing, and the longitudinal assessment of needs-supplies, workplace flourishing, and intention to leave.

1.3.2 Specific Objectives

The specific objectives of this research were to:

- Assess the psychometric properties of a measure of flourishing at work.
- Investigate the prevalence of flourishing/languishing of teachers.
- Study the relationship between workplace flourishing (as measured by the FAWS), PE fit, in-role performance, intention to leave, and OCB.
- Study the relationship between workplace flourishing (as measured by the FAWS-SF), in-role performance, intention to leave, and OCB.
- Investigate the effects of positive practices on workplace flourishing.
- Study the causal relationship between needs-supplies, workplace flourishing, and intention to leave.

1.4 RESEARCH METHOD

The research method consisted of two phases, namely a literature review and an empirical study. The results were presented in the form of three research articles.

1.4.1 Research Design

A quantitative research approach was followed. Quantitative research refers to the collection of numerical data and the utilisation of mathematically grounded methods to analyse the data (Muijs, 2010). More specifically, a cross-sectional research approach was used for Articles 1 and 2, and a longitudinal research approach was used in Article 3. According to Salkind

(2009), a cross-sectional method allows the researcher to examine various groups of individuals during a single point in time. Within the cross-sectional design, latent variable modelling was used to assess model fit, as well as direct, indirect, and interaction effects. Latent variable modelling reduces bias stemming from measurement error, making it possible to assess both direct and indirect effects. A longitudinal design allows the researcher to examine various groups of individuals during multiple points in time. A cross-lagged modelling approach was followed to assess the longitudinal data.

1.4.2 Participants

The study was conducted among secondary school teachers, heads of departments, vice-principals, and principals in the Sedibeng East and West District in Gauteng. A stratified random sample of 258 employees participated in the first part of the study, while 201 employees participated in the longitudinal part of the study across two time waves. Participants differed in terms of gender, age, race, children, marital status, sexual orientation, geographic location, highest level of education, job position, employment type, experience, and trade union membership.

1.4.3 Measuring Instruments

The following questionnaires were used in the empirical study:

Workplace flourishing was measured with the *Flourishing-at-Work Scale* (FAWS; Rautenbach & Rothmann, in press-b). The FAWS consists of 46 items scored on a six-point scale ranging from 1 (*never*) to 6 (*every day*). The FAWS encompasses three dimensions: emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB). EWB comprises three dimensions (three items per dimension): positive affect (e.g. “During the past month at work, how often did you feel grateful?”), negative affect (e.g. “During the past month at work, how often did you feel depressed?”), and job satisfaction (e.g. “During the past month at work, how often did you experience real enjoyment in your work?”). PWB comprises six dimensions: autonomy satisfaction (three items, e.g. “During the past month at work, how often did you feel that you can be yourself at your job?”),

competence satisfaction (three items, e.g. “During the past month at work, how often did you feel good at managing the responsibilities of your job?”), relatedness satisfaction (three items, e.g. “During the past month at work, how often did you feel that people involve you in social activities at work?”), learning (two items, e.g. “During the past month at work, how often did you find that you continue to learn more as time goes by?”), meaningful work (three items, e.g. “During the past month at work, how often did you feel that the work you do serves a greater purpose?”), and engagement (seven items, e.g. “During the past month at work, how often did you become enthusiastic about your job?”). SWB comprises five dimensions (three items per dimension): social acceptance (e.g. “During the past month at work, how often did you feel that people in your school are basically good?”), social actualisation (e.g. “During the past month at work, how often did you feel this school is becoming a better place for people like you?”), social coherence (e.g. “During the past month at work, how often did you feel that the way your school works makes sense to you?”), social contribution (e.g. “During the past month at work, how often did you feel you have something important to contribute to this school?”), and social integration (e.g. “During the past month at work, how often did you feel you really belong to this school?”). It should be noted that the initial FAWS scale only utilised five items to measure SWB (one item per dimension). Therefore, two additional items were added to each sub-dimension of SWB, following the suggestion of three items per facet (Kline, 2010). Rautenbach and Rothmann (in press-b) determined a three-factor structure, with Raykov’s rho coefficients ranging from 0.77 to 0.95.

Workplace flourishing was measured with the *Flourishing-at-Work Scale – Short Form* (FAWS-SF; Rautenbach & Rothmann, in press-a). The FAWS-SF consists of the 17 most archetypal items expressive of the construct, scored on a six-point scale ranging from 1 (*never*) to 6 (*every day*). The FAWS-SF encompasses three dimensions: emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB). EWB comprises two dimensions, namely positive affect (measured by two items) (“During the past month at work, how often did you feel happy?”; “During the past month at work, how often did you feel grateful?”), and job satisfaction (“During the past month at work, how often did you experience satisfaction with your job?”). PWB comprises nine dimensions, namely autonomy (“During the past month at work, how often did you feel confident to think or express your own ideas and opinions?”), competence (“During the past month at work, how often did you feel good at managing the responsibilities of your job?”), relatedness (“During the past month at work, how often did you feel really connected with other people at your job?”), meaning

(“During the past month at work, how often did you feel that you understand how your work contributes to your life’s meaning?”), purpose (“During the past month at work, how often did you feel that the work you do serves a greater purpose?”), cognitive engagement (“During the past month at work, how often did you focus a great deal of attention on your work?”), emotional engagement (“During the past month at work, how often did you get excited when you perform well on your job?”), physical engagement (“During the past month at work, how often did you feel energised when you work?”), and learning (“During the past month at work, how often did you find yourself learning?”). SWB comprises five dimensions, namely social contribution (“During the past month at work, how often did you feel you are a key member of this school?”), social acceptance (“During the past month at work, how often did you feel that people in your school are basically good?”), social actualisation (“During the past month at work, how often did you feel that your school is becoming a better place for people like you?”), social integration (“During the past month at work, how often did you feel that you really belong to your school?”), and social coherence (“During the past month at work, how often did you feel that the way your school works, makes sense to you?”). Internal consistencies ranging from 0.82 to 0.90 have been established (Rautenbach & Rothmann, in press-a).

PE fit was measured with the *Perceived Fit Scale* (PFS; Cable & DeRue, 2002). The PFS consists of nine items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The PFS comprises three dimensions: person-organisation fit (PO fit), need-supplies fit (NS fit), and demands-abilities fit (DA fit). PO fit was measured with three items (e.g. “The things I value in life are very similar to the things my organisation values”). NS fit was measured with three items (e.g. “There is a good fit between what my job offers me and what I am looking for in a job”). DA fit was measured with three items (e.g. “The match is very good between the demands of my job and my personal skills”). Cronbach alpha coefficients ranging from 0.84 to 0.98 have been reported for the PFS subscales (Cable & DeRue, 2002; Hinkle & Choi, 2009). Cable and DeRue (2002) established good convergent and divergent validity for the PFS, while it was also further validated by Hinkle and Choi (2009). In South Africa, Redelinghuys and Botha (2016) established a three-factor structure, with internal consistencies ranging from 0.85 to 0.88.

Intention to leave was measured with the *Turnover Intention Scale* (TIS; Sjöberg & Sverke, 2000). The TIS consists of three items scored on a five-point scale ranging from 1 (*strongly*

disagree) to 5 (*strongly agree*). Encompassing a single dimension, a sample item of the scale includes: “I am actively looking for other jobs”. Sjöberg and Sverke (2000) reported a Cronbach alpha coefficient of 0.83 for the scale. Within a South African context, Redelinghuys and Botha (2016) established a reliability coefficient of 0.90.

In-role performance was measured with the *In-Role Behaviour (IRB) Scale* (Williams & Anderson, 1991). The IRB scale consists of seven items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Encompassing a single dimension, a sample item of the scale includes: “I perform tasks that are expected of me”. The items were formulated in a manner which enabled employees to rate their own performance, as external evaluation was prohibited. Williams and Anderson (1991) reported a Cronbach alpha coefficient of 0.91 for the scale.

OCB was measured using the *Organisational Citizenship Behaviour Scale (OCBS)* (Rothmann, 2010). The OCBS consists of six items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The OCBS encompasses two dimensions, namely assistance to co-workers, and assistance to the organisation. Assistance to co-workers in the organisation was measured with three items (e.g. “I give up time to help co-workers who have work or non-work problems”). Assistance to the organisation was also measured with three items (e.g. “I take action to protect the organisation from potential problems”). Cronbach alpha coefficients higher than 0.70 have been found (Diedericks & Rothmann, 2014).

Positive practices were measured with the *Positive Practices Questionnaire (PPQ)* (Cameron et al., 2011). The PPQ consists of 29 items scored on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The PPQ encompasses six dimensions, namely caring, compassionate support, forgiveness, inspiration, meaning, as well as respect, integrity, and gratitude. Caring was measured with four items (e.g. “We are interested in each other”). Compassionate support was measured with seven items (e.g. “We show compassion for each other”). Forgiveness was measured using three items (e.g. “We forgive mistakes”). Inspiration was also measured using three items (e.g. “We inspire each other”). Meaning was measured with five items (e.g. “We are being renewed by what we do”). Respect, integrity, and gratitude were measured with seven items (e.g. “We treat each other with respect”). The 29 items had in mind the organisation as the unit of analysis, not the individual respondent.

Organisational attributes and activities were assessed, not individual behaviour or traits. Reliable Cronbach alpha coefficients have been established (Cameron et al., 2011).

Biographical particulars were gathered using a *biographical questionnaire*, requesting details regarding gender, age, race, educational level, marital status, religion, sexual orientation, geographic location, job title, employment type, and trade union membership.

1.4.4 Research Procedure

Permission to conduct the study was obtained from the necessary authorities at the Gauteng Department of Education (GDE), whereupon the researcher was provided with a GDE research approval letter (Reference number: D2016/171). This letter was provided to the Sedibeng East and West District offices for further approval. Ethical clearance was further obtained from the Ethics Committee at the North-West University's Vaal Triangle Campus (Ethics number: NWU-HS-2015-0193). Once permission had been obtained from all the necessary authorities, the researcher contacted the principals of secondary schools in the Sedibeng East and West District to obtain permission to conduct research at their respective schools. Dates and times were arranged with the participating schools, the purpose of the study was explained and informed consent was obtained. Further arrangements were made to distribute the questionnaires to those consenting to the study. These participants were allowed two weeks to complete the English questionnaires, which would take approximately 30 minutes of their time. A week before the final submission of the questionnaires, reminders were sent out to the relevant parties. A secure box was arranged for participants to return their questionnaires. The same procedure was repeated six months later to collect the second wave of data.

1.4.5 Statistical Analysis

The Mplus 7.4 statistical program (Muthén & Muthén, 1998-2016) was employed to conduct the statistical analysis. Furthermore, the data was explored using descriptive statistics, utilizing SPSS23 (IBM Corp, 2016). Raykov's rho coefficients (Raykov, 2009) were used to assess the reliability of the measuring instruments. To measure the proposed relationships between constructs in the study, Pearson product-moment correlation coefficients were used.

Effect sizes were used to determine the practical significance of the results (Cohen, 1988). A cut-off point of 0.30 (medium effect) and 0.50 (large effect) was set for the practical significance of the correlation coefficients (Cohen, 1988). The confidence interval level for statistical significance was set at a value of 95% ($p \leq 0.05$). A measurement model was specified and tested against numerous goodness-of-fit indices.

Four competing measurement models were specified and tested to make model comparison possible as suggested by Wang and Wang (2012). The best fitting model was re-specified as a structural model and compared with competing structural models. The following Mplus indices were used in the study (depending on the applied Mplus estimator): the chi-square statistic, the root mean square error of approximation (RMSEA), the Tucker-Lewis index (TLI), the comparative fit index (CFI) (Hair, Black, Babin, & Andersen, 2010), the weighted root mean square residual (WRMR), the Akaike information criterion (AIC), and the Bayes information criterion (BIC). CFI and TLI values of 0.90 and higher were regarded as acceptable. RMSEA values of 0.08 and lower indicated close fit between the model and the data. Cohen's (1988) guidelines were used to assess the practical significance of the variances explained (R^2) in the structural model, acknowledging values lower than 0.09 as having a small effect, values lower than 0.25 a medium effect, and values higher than 0.25 a large effect.

To determine whether any relationships were indirectly affected by independent variables, the procedure explained by Hayes (2009) was used. Bootstrapping was used to construct two-sided bias-corrected 95% confidence intervals (CIs) to assess indirect effects. Lower and upper CIs were reported. The number of bootstrap samples was set to 10 000.

Multivariate analysis of variance (MANOVA) was used to determine the significance of differences between the flourishing levels of employees and the positive practices they experience. MANOVA creates a new dependent variable that maximises group differences based on the set of dependent variables. Eta square (η^2) values were used to assess practical significance. One-way analysis was then performed on the newly created dependent variable. The Wilks' lambda statistic was used to test the significance of the effects (Tabachnick & Fidell, 2013). Significant effects in MANOVA were further examined through one-way analysis of variance (ANOVA), to determine which dependent variables had been affected.

Lastly, Tukey tests were performed to investigate which groups differed significantly based on the ANOVAs.

A longitudinal measurement invariance analysis was conducted by sequentially testing a series of progressively restrictive models, which assessed configural invariance, metric invariance, and scalar invariance (see Vandenberg & Lance, 2000). Measurement invariance assesses whether the same constructs are examined over time (Horn & McArdle, 1992). After measurement invariance had been established, the cross-lagged model with auto-regression control and cross-lagged paths was specified between the time periods (Taris, 2000). Cross-lagged models allow the researcher to examine the temporal order in the relationship between variables (Cook & Campbell, 1979).

1.5 ETHICAL CONSIDERATIONS

This study was based on sound ethical foundations, accentuating aspects such as informed consent and voluntary participation. All necessary information regarding the study (e.g. who will have access to the results, inclusion criteria, purpose of the study) was clearly communicated to the participants in a comprehensible manner. Anonymity in the reporting of findings was fully guaranteed. All the data captured was treated with the utmost care and confidentiality, respecting participants' rights and dignity. Participants were allowed to withdraw from the research at any time without negative repercussions.

1.6 CHAPTER LAYOUT

Chapter 1: Introduction

Chapter 2: Workplace flourishing: Antecedents and outcomes

Chapter 3: Validation of the Flourishing-at-Work Scale – Short Form

Chapter 4: Needs-supplies fit, flourishing at work, and intention to leave: A longitudinal study

Chapter 5: Conclusions, limitations and recommendations

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CHAPTER 2

RESEARCH ARTICLE 1

Workplace flourishing: Antecedents and outcomes

Abstract

The aim of this study was to investigate relationships between person-environment fit, workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour. A cross-sectional survey design was used with a sample of 258 secondary school teachers, heads of departments, vice-principals, and principals working in the Sedibeng East and West District in Gauteng. The Perceived Fit Scale, Flourishing-at-Work Scale, Turnover Intention Scale, In-Role Behaviour Scale, and Organisational Citizenship Behaviour Scale were administered. Flourishing at work consisted of emotional well-being (job satisfaction, positive affect and low negative affect), psychological well-being (autonomy satisfaction, competence satisfaction, relatedness satisfaction, meaning, engagement and learning), and social well-being (social contribution, social integration, social actualisation, social acceptance and social coherence). The results indicated a positive relationship between person-environment fit and workplace flourishing. Workplace flourishing had a negative relationship with intention to leave, and a positive relationship with in-role performance and organisational citizenship behaviour respectively. Person-environment fit indirectly affected in-role performance and organisational citizenship behaviour via workplace flourishing.

Keywords: Workplace flourishing, person-environment fit, intention to leave, in-role performance, organisational citizenship behaviour

Quality education plays a pivotal role in developing the South African economy (Jackson, Rothmann, & Van de Vijver, 2006). This requires a motivated, healthy, committed, competent, and well-functioning teacher corps (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Louw, George, & Esterhuysen, 2011). Although studies (e.g. Jackson et al., 2006; Ngidi & Sibaya, 2002; Peltzer, Shisana, Zuma, Van Wyk, & Zungu-Dirwayi, 2009) have been conducted regarding the well-being of teachers, most studies focused on the negative aspects associated with teacher functioning (e.g. stress and burnout). It would be logical to investigate what is 'right' about people to expand our knowledge about what we already know is 'wrong' (Seligman, Steen, Park, & Peterson, 2005). Therefore, it is crucial to add to existing literature on the positive functioning of teachers, such as positive affect, prosocial relationships, and self-efficacy (e.g. Pas, Bradshaw, & Hershfeldt, 2012; Van Horn, Taris, Schaufeli, & Schreurs, 2004). These studies, however, focused on separate accounts of well-being, not taking into account the multidimensionality of well-being, for instance, workplace flourishing (emotional, psychological, and social well-being).

Turner, Barling, and Zacharatos (2002) proposed the extension of research to explore more comprehensively the positive sides of work, as Dunn and Dougherty (2008) state: "As a society, we need to know how people can flourish" (p. 314). Unfortunately, relatively little is known about the work and career features essential for flourishing (Kidd, 2008). It is vital to investigate the factors associated with workplace flourishing to add to its thin, yet promising literature base. To date, research across various industries has consistently indicated that less than half of the population flourish at work. This warrants further investigation into the underlying mechanisms that influence workplace flourishing, to more accurately explain the factors that may impede or facilitate emotional, psychological, and social well-being in the workplace. Although previous studies have examined antecedents of workplace flourishing, its relationship with one of the most consistent predictors of individual and organisational outcomes in social research, namely person-environment fit, is yet to be examined.

Another research gap is that no previous studies have examined outcomes in relation to workplace flourishing as modelled by Rautenbach and Rothmann (in press). This warrants the investigation of outcomes related to workplace flourishing, to emphasise the benefits of flourishing or the consequences of languishing in the workplace. The current study assessed intention to leave, in-role performance, and organisational citizenship behaviour as outcomes.

These are important outcomes, as performance and employee retention form the backbone of organisational performance and effectiveness.

Flourishing at Work

Although flourishing in general life (Keyes, 2002) has positioned itself as the most prominent multidimensional model of well-being, flourishing also occurs in work and organisational contexts (Rothmann, 2013). Rothmann (2013) developed a model which explicitly focuses on flourishing at work. Building on the study of Keyes (2002), Rothmann (2013) acknowledged that flourishing is a multidimensional construct consisting of emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB). He deviated from Keyes' (2002) model to incorporate different sub-dimensions of EWB and PWB, making it more applicable to the workplace. Although flourishing in the work context and flourishing in general shared 54% of the variance, he found that job-contextual factors better predicted organisational outcomes than flourishing in general. This scientifically warrants the conceptualisation and measurement of flourishing in the work context.

EWB at work incorporates three types of employee judgements, namely job satisfaction, positive emotions, and negative emotions. Locke (1976) defines job satisfaction as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1304). Job satisfaction consists of cognitive and affective components (Rothmann, 2013). Cognitive job satisfaction refers to the degree of congruence between employees’ perceptions and standards (Weiss & Cropanzano, 1996), while affective job satisfaction reflects feelings and emotions associated with a job (Rothmann, 2013).

Positive affect is key to an individual’s ability to flourish, to prosper mentally, and to grow psychologically (Rothmann, 2013). Positive affect refers to pleasant reactions towards occurrences at work, including joy, interest, and gratitude. In contrast, negative affect encompasses unpleasant reactions towards organisational happenings, such as sadness, boredom, and anxiety. An individual’s ratio of positive to negative affect is vital since positive affect builds more durable resources in people (Fredrickson, 2006). In this regard, the frequency of affect has a stronger impact on feeling well than the intensity of affect (Diener, Sandvik, & Pavot, 1991).

Although both job satisfaction and affect have to deal with the emotions of employees, the focus of the constructs is slightly different, which makes both constructs valuable components of flourishing. Contentment (job satisfaction) refers to the degree to which employees perceive their wants to be met, while affect relates to the extent to which employees perceive their needs to be met (Rojas & Veenhoven, 2013).

PWB includes the following factors: work engagement (consisting of energy, dedication, and absorption), meaning and purpose in work, self-determination (consisting of autonomy, competence, and relatedness satisfaction), and learning.

The contribution of work engagement towards flourishing is clearly evident in the models of Peterson, Park, and Seligman (2005) and Seligman (2011), as they focus on the use of signature strengths and flow respectively (Rothmann, 2013). Work engagement has been primarily conceptualised by two perspectives (e.g. Bakker, Schaufeli, Leiter, & Taris, 2008; Kahn, 1990), and both perspectives have been examined in numerous South African studies (e.g. Bosman, Buitendach, & Rothmann, 2005; Rothmann & Rothmann, 2010; Rothmann & Welsh, 2013). Three components constitute engagement, namely a physical component (typified by a strong involvement in job-related tasks and the exhibition of vitality), a cognitive component (typified by an alertness at work and the experience of absorption and involvement), and an emotional/affective component (typified by a connectedness to one's job and others and the exhibition of dedication) (Kahn & Heaphy, 2014).

Purpose refers to possessing a sense of desired end states connected to one's work-related behaviour (Barrick, Mount, & Li, 2013). Meaning reflects the perceived significance of employees' work experiences (Barrick et al., 2013). Meaning of work refers to the output associated with having made sense of something (Rothmann, 2015-a). The meaningfulness of work reflects the amount of significance attached to an employee's work (Pratt & Ashforth, 2003). Meaning at work relates to a sense of significance people experience within work and organisational contexts, while purpose in the work context might be sought during times of hardship (Rothmann, 2013). A lack of meaningfulness in the work context may result in apathy and work detachment (Thomas & Velthouse, 1990).

Four dimensions of PWB in the model of Ryff and Singer (1998) and the mental health continuum (MHC; Keyes, 2005), namely autonomy, personal growth, mastery, and positive

relations, describe how people flourish (Rothmann, 2013). Making it more applicable to the work context, the dimensions above could be covered by the three dimensions of psychological need satisfaction (i.e. autonomy, relatedness, and competence) as rooted in self-determination theory (Deci & Ryan, 1985; Rothmann, 2013). These three psychological needs are important for employees to flourish in the workplace, as employees are attracted to circumstances conducive to need satisfaction (Rothmann, 2013). The need for autonomy is typified by the yearning to experience freedom and choice when executing work-related tasks; the need for relatedness is typified by the innate need of an employee to experience a sense of connectedness to others, to love and care for others, as well as to be loved and cared for; and the need for competence is typified by an employee's inherent desire to feel effective in his/her interaction with the environment.

Learning is a vital component of PWB within work and organisational contexts as it emphasises employee development and improvement (Rothmann, 2013). Learning is defined as the acquisition and application of knowledge and skills to one's work (Spreitzer, Lam, & Fritz, 2010). Learning is a vital component in the knowledge age, as employees are likely to progress through a different range of jobs across various types of employment, organisations, industries, and even countries. In the model of Spreitzer, Porath, and Gibson (2012), thriving is dependent on the combined experience of vitality and learning in the workplace.

The flourishing model of Keyes (2002) accentuates the importance of SWB, as the latter assesses one's societal circumstance and functioning. Initially in Rothmann's (2013) flourishing model, the SWB dimension remained consistent with that of Keyes (2002). However, it was later adapted to the work context. Therefore, positive social functioning includes five dimensions, namely social acceptance, social actualisation, social coherence, social contribution, and social integration.

Social acceptance relates to the acceptance of the diversity of colleagues. Employees who are socially accepting, believe that others are trustworthy, capable of kindness, and conscientious. They hold favourable views of their fellow man and experience a sense of comfort around others. Social acceptance is regarded as the social equivalent of personal acceptance (Keyes, 1998), suggesting that individuals who are accepting of both the positive and negative aspects of their lives demonstrate good mental health (Ryff, 1989).

Social actualisation is the belief in one's organisation, team, and colleagues' potential. Socially healthy employees have the vision that they, and co-workers, are potential beneficiaries of social growth. Social actualisation embodies the desire to continuously grow and develop, consistent with theories of self-realisation (Maslow, 1968) and personal growth (Ryff, 1989).

Social coherence is the belief that one's organisation and social relations at work are both meaningful and comprehensible. Socially coherent employees are not merely concerned about their surroundings, but also feel that they can meaningfully interpret their surroundings (Keyes, 1998).

Social contribution is the belief that one's daily work activities add value to one's team, department, and organisation. It incorporates the belief that one fulfils key responsibilities within the organisational context. Social contribution resembles the concept of self-efficacy (Bandura, 1977), which reflects the belief that one is capable of performing and accomplishing goals.

Social integration refers to the belief that one experiences a sense of communal connectedness and belongingness within the work environment. It embodies the concept of social cohesion (Durkheim, 1951), which asserts that norms, beliefs, and values (collective consciousness) bind people together and create social integration.

The absence of social health is a well-known concern in classic sociological theory (Keyes, 1998). The social element of work plays a pivotal role in the flourishing of employees (Grant, 2008), as employees are embedded within social organisational structures, facing endless social tasks and challenges (Keyes, 1998). More than ever, workplace relationships are becoming increasingly important, due to an enhanced focus on teamwork, interdependence, and collaboration between individuals, teams, departments, and institutions (Rothmann, 2015-b). Regardless of culture, individuals want to contribute towards the preservation and promotion of their fellow man's well-being (Rothmann, 2015-b). Jobs that enable employees to do well and make a difference socially create opportunities for employees to flourish (Grant, 2008).

Person-environment Fit

Understanding person-environment (PE) fit is vital due to the impact it may have on employees during different phases of their organisational life cycles (Greguras & Diefendorff, 2009). Cable and DeRue (2002) conceptualised PE fit as a multidimensional construct, comprising person-organisation (PO) fit, needs-supplies (NS) fit, and demands-abilities (DA) fit. PO fit refers to the perceived congruence between employee and organisational values (Cable & DeRue, 2002). Employees should feel attached to organisation's broader mission when they believe that their personal values match that of their organisation and colleagues. Employees form separate cognitions regarding their fit with their organisation and aspects of their job. NS fit refers to the perceived congruence between job rewards (what the organisation offers) and employee needs (Cable & DeRue, 2002). When employees perceive a match between what they expect from their job, and what they actually receive, job satisfaction materialises (Dawis & Lofquist, 1984; Locke 1976). DA fit, occasionally referred to as PJ fit (Hinkle & Choi, 2009), refers to the perceived congruence between job demands and the possessed knowledge, skills, and abilities of employees (Cable & DeRue, 2002). When an employee does not have the ability to sufficiently deal with his or her job demands, he or she will be less efficient and deliver sub-par work. Similarly, when an employee's abilities exceed that of his or her job demands, he or she will become apathetic.

Although PE fit has not been studied as an antecedent of workplace flourishing before, there is a reason to suggest this relationship. Various theories, for example the theory of work adjustment (TWA; Dawis & Lofquist, 1984), the attraction-selection-attrition theory (ASA; Schneider, 1987), and general PE fit theories (e.g. Cable & DeRue, 2002) posit that when congruence is achieved between the employee and the work environment, positive outcomes ensue. The notion that positive results arise as a result of good fit is well supported in the literature. Empirical studies have shown that PE fit (or elements thereof) links to job satisfaction (Cable & DeRue, 2002; Kristof-Brown, Zimmerman, & Johnson, 2005; Verquer, Beehr, & Wagner, 2003), positive affect (Gabriel, Diefendorff, Chandler, Moran, & Greguras 2014), meaningful work (Duffy, Autin, & Bott, 2015; Kahn, 1990; Shamir, 1991), psychological need satisfaction (Greguras & Diefendorff, 2009), work engagement (Chen, Yen, & Tsai, 2014), as well as psychological empowerment (Gregory, Albritton, & Osmonbekov, 2010) which consists of meaning, competence, self-determination, and impact

(Spreitzer, 1995). Payne (1981) also suggested that a degree of misfit may lead to a certain level of stress or challenge which encourages learning and development.

Furthermore, basic emotional process theories propose that affective states are moulded by fit. Cognitive appraisal theories of emotion (Roseman, Spindel, & Jose, 1990; Scherer, 1999) posit that circumstantial cognitive evaluations yield affective responses. Therefore, when an employee makes a cognitive evaluation regarding his or her fit with his or her work environment, affective responses (e.g. positive affect, job satisfaction, and work engagement) should be induced.

In terms of social well-being, social identity theory (Tajfel & Turner, 1986) proposes that employees who experience fit with their organisation's values become part of a 'psychological group', defined as the "collection of people who share the same social identification or define themselves in terms of the same social category membership" (Turner, 1984, p. 530). Byrne's (1971) similarity-attraction hypothesis also posits that people are likely to be attracted to other people similar to themselves, regarding values and other factors. Empirical studies have shown that PE fit (or elements thereof) links to organisational commitment (Farzaneh, Farashah, & Kazemi, 2014) and organisational identification (Cable & DeRue, 2002), which illustrates a sense of belonging and integration. In a community setting, PE fit has also been linked to social integration (Segal, Silverman, & Baumohl, 1989).

Based on the preceding discussion, the current study posits the following hypothesis:

Hypothesis 1: PE fit and workplace flourishing are positively related.

Due to the heightened interest in the antecedents of workplace flourishing, research associated with its outcomes is limited. Therefore, investigations of additional outcomes are needed, seeing that it is vital to investigate the factors associated with flourishing to implement interventions accordingly (Rothmann, 2013).

Outcomes of Workplace Flourishing

Although outcomes associated with flourishing in general life have received reasonable attention (e.g. Diedericks & Rothmann, 2014, Swart & Rothmann, 2012), research into the

outcomes of workplace flourishing is still in its infancy stage. Rothmann (2013) established that workplace flourishing is related to turnover intention, organisational commitment, as well as organisational citizenship behaviour (OCB). Therefore, when employees flourish in the workplace, they are less likely to contemplate leaving the organisation, are more committed to the organisation, and go the extra mile for the organisation. Due to the evolution of the workplace flourishing concept, outcomes should continuously be tested with the latest model to make validated inferences. Thus, the current study assessed the relationship between the most recent model of workplace flourishing with the intention to leave, in-role performance, and OCB.

Intention to leave. Intention to leave refers to an employee's cognisant and intentional frame of mind to part ways with his or her organisation (Tett & Meyer, 1993). When employees flourish, they are less likely to contemplate leaving the organisation (Diedericks & Rothmann, 2014). Although the association between workplace flourishing and intention to leave has been studied before (see Rothmann, 2013), the previous model differed significantly from the current one.

Various theories can be used to explain the relationship between elements of workplace flourishing and intention to leave. Job satisfaction (element of EWB) plays a central part in various models of employee turnover (e.g. Lee & Mitchell, 1994; Mobley, 1977), suggesting that when employees are not satisfied with their jobs, they will start to explore other possibilities through a range of evaluation processes. Additionally, job embeddedness theory postulates that employees make retention decisions based on links, fit, and sacrifice (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001). When employees have close links with their colleagues and experience fit within their workgroup and organisation, the sacrifice in leaving the organisation would be much more significant. This suggests that employees who experience social well-being and a sense of relatedness (element of PWB) in the workplace are more likely to remain with the organisation, as they have much more to sacrifice if they leave. Empirical studies have also linked various elements of workplace flourishing to intention to leave, such as affect (Thoresen, Kaplan, Barsky, Warren, & De Chermont, 2003), work engagement (Mendes & Stander, 2011), psychological empowerment (Bester, Stander, Van Zyl, 2015), job embeddedness (Halbesleben & Wheeler, 2008), job satisfaction (Redelinghuys & Botha, 2015), and meaningful work (Janik & Rothmann, 2015).

Based on the preceding discussion, the current study posits the following hypothesis:

Hypothesis 2: Workplace flourishing and intention to leave are negatively related.

In-role performance. Organisations strive for techniques to enhance the job performance of employees and consequently focus on the retention of their best performers (Ulrich, 1997). Task performance or in-role performance refers to the activities an employee is expected to fulfil as stipulated in his or her formal job requirements (Borman & Motowidlo, 1997; Williams & Anderson, 1991).

Although the relationship between workplace flourishing and in-role performance has not been studied before, there is reason to posit such a relationship. Despite mixed results, the flourishing-performance relationship can be explained by the happy/productive worker thesis. The latter argument postulates that when employees are happy (which is typically measured by job satisfaction), they should be more productive. In a quantitative and qualitative review on the job satisfaction-job performance relationship, results showed that job satisfaction (a component of EWB) effectively predicted job performance (Judge, Thoresen, Bono, & Patton, 2001). From a different perspective, Cropanzano and Wright (2001) expanded the happy/productive worker thesis to explore the relationship between PWB and job performance. In their study, a positive correlation between the constructs was found. Furthermore, Diedericks and Rothmann (2014) established that flourishing is negatively associated with counterproductive behaviour. Therefore, when employees experience EWB, PWB, and SWB, they are less inclined to engage in counterproductive behaviour at work, which should enhance their performance.

Based on the preceding discussion, the current study posits the following hypothesis:

Hypothesis 3: Workplace flourishing and in-role performance are positively related.

Organisational citizenship behaviour. Another construct that has been studied in association with workplace flourishing is OCB. Lambert (2006) defines OCB as employee behaviour that contributes beyond what is expected in the basic job requirements. Four dimensions constitute OCB, namely helping, loyalty, advocacy, as well as functional participation and obedience (Coyle-Shapiro, 2002; Van Dyne, Graham, & Dienesch, 1994). Helping refers to the degree to which employees offer assistance to others; loyalty refers to the identification with or loyalty towards the organisation, which involves cooperation and serving

organisational interests; advocacy refers to behaviour aimed at others in the organisation, which includes the maintenance of high standards, the challenging of others, and the proposition of change; while functional participation assumes a more personal focus, while simultaneously contributing towards organisational efficiency (Coyle-Shapiro, 2002; Van Dyne et al., 1994). Although the association between workplace flourishing and OCB has been studied before (see Rothmann, 2013); the previous model varied significantly from the current one.

The relationship between workplace flourishing and OCB could be explained by social exchange theory (Blau, 1964). The latter theory posits that employees and organisations enter into social exchanges with one another when they perceive the other party to be a worthy contributor to the relationship. When employees perceive their organisation and colleagues to contribute significantly towards their emotional, psychological, and social well-being, they should increase their helping behaviours towards them in order to honour their part of the exchange. Empirical studies have also linked various elements of workplace flourishing to OCB, such as job satisfaction (LePine, Erez, & Johnson, 2002), positive affect (Ziegler, Schlett, Casel, & Diehl, 2012), work engagement (Babcock-Roberson & Strickland, 2010), psychological empowerment (Karavardar, 2014), and job embeddedness (Lee, Mitchell, Sablinski, Burton, & Holtom, 2004).

Based on the preceding discussion, the current study posits the following hypothesis:

Hypothesis 4: Workplace flourishing and OCB are positively related.

Indirect Effects of Person-environment Fit

Although PE fit, workplace flourishing, intention to leave, in-role performance, and OCB have not been studied in conjunction before, there may be reason to suggest relationships. Meta-analytic studies (Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003) suggest that PE fit consistently has a more significant impact on attitudinal outcomes (e.g. job satisfaction) than behavioural outcomes (e.g. in-role performance), possibly suggesting that other factors may explicate the mechanisms through which PE fit relates to behavioural outcomes. Fishbein and Ajzen (1975) contend that beliefs precede attitudes, intentions, and ultimately behaviours. Following this framework, one can predict that beliefs

regarding PE fit will precede attitudes (e.g. job satisfaction, work engagement), and ultimately intentions (intention to leave) and behaviours (extra-role behaviour and in-role behaviour).

The notion of attitudinal variables as mediators between PE fit and behavioural outcomes is well supported in literature. Research indicates that PE fit (or elements thereof) has an impact on OCB through job satisfaction (Van Dyne et al., 1994) and organisational commitment (Farzenah et al., 2014); on in-role performance through psychological empowerment (Gregory et al., 2010) and psychological need satisfaction (Greguras & Diefendorff, 2009); and on intention to leave through job satisfaction (Redelinghuys & Botha, 2015; Wheeler, Gallagher, Brouer, & Sablynski, 2007) and work engagement (Peng, Lee, & Tseng, 2014).

Based on the preceding discussion, the current study posits the following hypotheses:

Hypothesis 5: PE fit indirectly affects intention to leave via workplace flourishing.

Hypothesis 6: PE fit indirectly affects in-role performance via workplace flourishing.

Hypothesis 7: PE fit indirectly affects OCB via workplace flourishing.

Aim

The aim of this study was to investigate relationships between person-environment fit, workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour.

Method

Research Design

A cross-sectional research approach was utilised. According to Salkind (2009), a cross-sectional method allows the researcher to examine various groups of individuals during a single point in time.

Participants

A survey was conducted amongst secondary school teachers, HODs, vice-principals, and principals working in the Sedibeng East and West District in Gauteng. Approximately 800 questionnaires were distributed, of which 258 were completed satisfactory (response rate = 32%). Personal and professional sample characteristics are provided in Table 1 and Table 2 below.

More than two-thirds of the participants were female (73.6%), while 24% were male. The majority of the participants were white (74.4%), followed by African (18.6%), Indian (3.5%), Coloured (0.8%), and 0.4% belonging to an unstated race. Almost two-thirds of the participants were married (61.2%), while 17.4% were single, 7% divorced, 7% co-habiting, and 1.6% widowed. The majority of participants were heterosexual (87.2%), 4.3% homosexual, and 0.4% bisexual, while none of the participants were transgender. More than three-quarters of participants came from urban areas (87.6%), while 8.5% were rooted in rural areas. Approximately two-thirds of participants regarded religion as very important (67.8%). Exactly half of the participants had children (50%), while 35.3% did not have children.

Table 1

Characteristics of the Participants (N = 258)

Item	Category	Frequency	Percentage (%)
Gender	Male	62	24.0
	Female	190	73.6
	Missing values	6	2.3
Racial group	African	48	18.6
	Coloured	2	0.8
	Indian	9	3.5
	White	192	74.4
	Other	1	0.4
	Missing values	6	2.3
Marital status	Single	45	17.4
	Living with partner	18	7.0
	Married	158	61.2
	Divorced	18	7.0
	Widowed	4	1.6
	Missing Values	15	5.8
Sexual orientation	Heterosexual	225	87.2
	Bisexual	1	0.4
	Homosexual	11	4.3
	Missing values	21	8.1
Geographic location	Rural	22	8.5
	Urban	226	87.6
	Missing values	10	3.9
Religion	Not very important	6	2.3
	Not important	3	1.2
	Important	59	22.9
	Very important	175	67.8
	Missing values	15	5.8

Table 2

Characteristics of the Participants (N = 258)

Item	Category	Frequency	Percentage (%)
Highest level of education	Grade 12	4	1.6
	Diploma	39	15.1
	Degree	115	44.6
	Postgraduate degree	94	36.4
	Missing values	6	2.3
Job position	Teacher	204	79.1
	HOD	30	11.6
	Vice-principal	10	3.9
	Principal	6	2.3
	Missing values	8	3.1
Type of employment	Permanent	213	82.6
	SGB position	36	14.0
	Missing values	9	3.5
Trade union	Yes	213	82.6
	No	35	13.6
	Missing values	10	3.9
Trade union membership	SADTU	32	12.4
	NAPTOSA	64	24.8
	NATU	1	0.4
	SAOU	114	44.2
	Other	2	0.8
	Missing values	45	17.4

Almost half of the participants possessed a degree (44.6%), while 36.4% possessed a postgraduate degree, 15.1% a diploma, and 1.6% a Grade 12 certificate. The majority of the participants were teachers (79.1%) and HODs (11.6%). A total of 82.6% of the participants were permanently employed, while 14% occupied a SGB position. The majority of the participants belonged to a trade union (82.6%), while 13.6% did not have any affiliation with a trade union. Almost half of the participants belonged to SAOU (44.2%).

Measuring Instruments

Workplace flourishing was measured with the *Flourishing-at-Work Scale* (FAWS; Rautenbach & Rothmann, in press). The FAWS consists of 46 items scored on a six-point scale ranging from 1 (*never*) to 6 (*every day*). The FAWS encompasses three dimensions: emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB). EWB comprises three dimensions (three items per dimension): positive affect (e.g. “During the past month at work, how often did you feel grateful?”), negative affect (e.g. “During the past month at work, how often did you feel depressed?”), and job satisfaction (e.g. “During the past month at work, how often did you experience real enjoyment in your work?”). PWB comprises six dimensions: autonomy satisfaction (three items, e.g. “During the past month at work, how often did you feel that you can be yourself at your job?”), competence satisfaction (three items, e.g. “During the past month at work, how often did you feel good at managing the responsibilities of your job?”), relatedness satisfaction (three items, e.g. “During the past month at work, how often did you feel that people involve you in social activities at work?”), learning (two items, e.g. “During the past month at work, how often did you find that you continue to learn more as time goes by?”), meaningful work (three items, e.g. “During the past month at work, how often did you feel that the work you do serves a greater purpose?”), and engagement (seven items, e.g. “During the past month at work, how often did you become enthusiastic about your job?”). SWB comprises five dimensions (three items per dimension): social acceptance (e.g. “During the past month at work, how often did you feel that people in your school are basically good?”), social actualisation (e.g. “During the past month at work, how often did you feel this school is becoming a better place for people like you?”), social coherence (e.g. “During the past month at work, how often did you feel that the way your school works makes sense to you?”), social contribution (e.g. “During the past month at work, how often did you feel you have something important to contribute to this school?”), and social integration (e.g. “During the past month at work, how often did you feel you really belong to this school?”). It should be noted that the initial FAWS scale only utilised five items to measure SWB (one item per dimension). Therefore, two additional items were added to each sub-dimension of SWB, following the suggestion of three items per facet (Kline, 2010). Rautenbach and Rothmann (in press) determined a three-factor structure, with Raykov’s rho coefficients ranging from 0.77 to 0.95.

PE fit was measured with the *Perceived Fit Scale* (PFS; Cable & DeRue, 2002). The PFS consists of nine items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The PFS comprises three dimensions: person-organisation fit (PO fit), need-supplies fit (NS fit), and demands-abilities fit (DA fit). PO fit was measured with three items (e.g. “The things I value in life are very similar to the things my organisation values”). NS fit was measured with three items (e.g. “There is a good fit between what my job offers me and what I am looking for in a job”). DA fit was measured with three items (e.g. “The match is very good between the demands of my job and my personal skills”). Cronbach alpha coefficients ranging from 0.84 to 0.98 have been reported for the PFS subscales (Cable & DeRue, 2002; Hinkle & Choi, 2009). Cable and DeRue (2002) established good convergent and divergent validity for the PFS, while it was also further validated by Hinkle and Choi (2009). In South Africa, Redelinghuys and Botha (2016) established a three-factor structure, with internal consistencies ranging from 0.85 to 0.88.

Intention to leave was measured with the *Turnover Intention Scale* (TIS; Sjöberg & Sverke, 2000). The TIS consists of three items scored on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Encompassing a single dimension, a sample item of the scale includes: “I am actively looking for other jobs”. Sjöberg and Sverke (2000) reported a Cronbach alpha coefficient of 0.83 for the scale. Within a South African context, Redelinghuys and Botha (2016) established a reliability coefficient of 0.90.

In-role performance was measured with the *In-role Behaviour (IRB) Scale* (Williams & Anderson, 1991). The IRB scale consists of seven items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Encompassing a single dimension, a sample item of the scale includes: “I perform tasks that are expected of me”. The items were formulated in a manner which enabled employees to rate their own performance, as external evaluation was prohibited. Williams and Anderson (1991) reported a Cronbach alpha coefficient of 0.91 for the scale.

OCB was measured using the *Organisational Citizenship Behaviour Scale* (OCBS; Rothmann, 2010). The OCBS consists of six items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The OCBS encompasses two dimensions, namely assistance to co-workers, as well as assistance to the organisation. Assistance to co-workers in the organisation was measured with three items (e.g. “I give up time to help co-

workers who have work or non-work problems”). Assistance to the organisation was also measured with three items (e.g. “I take action to protect the organisation from potential problems”). Cronbach alpha coefficients higher than 0.70 have been found (Diedericks & Rothmann, 2014).

Research Procedure

The Gauteng Department of Education (GDE) gave permission to conduct the study and provided a GDE research approval letter (Reference number: D2016/171) to the researcher. This letter was provided to the Sedibeng East and West District offices for further approval. The Ethics Committee at the North-West University’s Vaal Triangle Campus (Ethics number: NWU-HS-2015-0193) provided ethical clearance for the study. Once all the authorities had approved the study, the researcher contacted the principals of secondary schools in the Sedibeng East and West District to obtain permission to conduct research at their respective schools. The researcher arranged dates and times with the participating schools, explained the reasons for the study and gained informed consent. Further arrangements were made to distribute the questionnaires to those consenting to the study. These participants were allowed two weeks to complete the English surveys, which would take approximately 30 minutes of their time. A week before the final submission of the questionnaires, reminders were sent out to the relevant parties. A secure box was arranged for participants to return their questionnaires.

Statistical Analysis

The Mplus 7.4 statistical program (Muthén & Muthén, 1998-2016) was employed to conduct the statistical analysis. The weighted least-squares with mean and variance adjustment (WLSMV) estimator was used as it does not assume normally distributed variables, thus providing the most suitable option for modelling categorical data. Raykov’s rho coefficients (Raykov, 2009) were used to assess the reliability of the measuring instruments. To measure the proposed relationships between constructs in the study, Pearson product-moment correlation coefficients were used. Effect sizes were used to determine the practical significance of the results (Cohen, 1988). A cut-off point of 0.30 (medium effect) and 0.50 (large effect) was set for the practical significance of the correlation coefficients (Cohen, 1988). The confidence interval level for statistical significance was set at a value of 95% ($p \leq$

0.05). A measurement model was specified and tested against numerous goodness-of-fit indices. Descriptive statistics were computed with SPSS23 (IBM Corp, 2016).

Four competing measurement models were specified and tested to make model comparison possible as suggested by Wang and Wang (2012). The best-fitting model was re-specified as a structural model and compared with competing structural models. The following Mplus indices were used in the study: the Chi-square statistic, the root mean square error of approximation (RMSEA), the Tucker-Lewis index (TLI), the comparative fit index (CFI) (Hair, Black, Babin, & Andersen, 2010), and the weighted root mean square residual (WRMR). CFI and TLI values of 0.90 and higher were regarded as acceptable. RMSEA values of 0.08 and lower indicated close fit between the model and the data.

To determine whether any relationships were indirectly affected by independent variables, the procedure explained by Hayes (2009) was used. Bootstrapping was used to construct two-sided bias-corrected 95% confidence intervals (CIs) to assess indirect effects. Lower and upper CIs were reported. The number of bootstrap samples was set to 10 000.

Results

Testing the Measurement Model

Confirmatory factor analyses (CFA) were carried out with the used scales through Mplus 7.41 (Muthén & Muthén, 1998-2016). A hypothesised measurement model (Model 1) was specified and tested, while four competing models (Models 2-5) were similarly specified and tested to determine whether the initial measuring model represented the best fitting model.

Measurement models were tested to determine whether each of the measurement items loaded significantly onto the scales with which they theoretically should. Model 1 consisted of five first-order latent variables, namely person-environment fit, workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour. Person-environment fit consisted of three latent variables, namely person-organisation fit, needs-supplies fit, and demands-abilities fit (all measured by three observed variables respectively). Workplace flourishing consisted of three latent variables, namely emotional well-being

(measured by three observed variables), psychological well-being (measured by six observed variables), and social well-being (measured by five observed variables). The other three latent variables were intention to leave (measured by three observed variables), in-role performance (measured by seven observed variables), and organisational citizenship behaviour. Organisational citizenship behaviour consisted of two latent variables, namely citizenship behaviour towards co-workers (measured by three observed variables) and citizenship behaviour towards the organisation (measured by three observed variables). All latent variables were correlated.

Following the same blueprint as Model 1, Models 2 to 5 were similarly specified and tested, with minor changes to the models. In Model 2, person-environment fit consisted of one latent variable, namely fit (measured by nine observed variables). In Model 3, workplace flourishing consisted of three latent variables, namely emotional well-being (measured by nine observed variables), psychological well-being (measured by 21 observed variables), and social well-being (measured by 15 observed variables). In Model 4, workplace flourishing consisted of two latent variables, namely hedonic well-being (measured by nine observed variables) and eudaimonic well-being (measured by 36 observed variables). In Model 5, person-environment fit and workplace flourishing jointly consisted of one latent variable, namely well-being (measured by 54 observed variables).

Table 3 presents the goodness-of-fit statistics for the five competing measurement models described above.

Table 3

Goodness-of-Fit Statistics of Competing Measurement Models

Model	χ^2	df	p	TLI	CFI	RMSEA		WRMR
						Est	90% CI	
1	4668.462*	2313	0.00	0.93	0.93	0.06	[0.060 0.065]	1.62
2	5028.588*	2316	0.00	0.92	0.92	0.07	[0.065 0.070]	1.74
3	6133.391*	2327	0.00	0.88	0.89	0.08	[0.077 0.082]	2.03
4	7080.640*	2328	0.00	0.85	0.86	0.09	[0.087 0.091]	2.27
5	8894.941*	2337	0.00	0.80	0.80	0.10	[0.102 0.107]	2.68

χ^2 , chi-square statistic; *df*, degrees of freedom; TLI, Tucker-Lewis index; CFI, comparative fit index; RMSEA, root mean square error of approximation; WRMR, weighted root mean square residual

In Table 3 it is evident that Model 1 has the best statistical fit of the 5 models. A χ^2 of 4668.462 was obtained for the initial measurement model. The fit indices for CFI and TLI were acceptable (> 0.90). The RMSEA (0.06) value of Model 1 was acceptable (< 0.08), while the WRMR (1.62) value was lower compared to the alternative models. From Table 3 it can thus be deduced that Model 1 fitted the data best.

Descriptive Statistics and Product-Moment Correlations

The descriptive statistics and reliability coefficients of the measuring instruments, as well as the product-moment correlation coefficients between the constructs are reported in Table 4.

From the results in Table 4, it can be seen that the reliabilities of all the measuring instruments were acceptable, ranging from 0.75 to 0.94 (Nunnally & Bernstein, 1994). All three dimensions of PE fit (PO fit, NS fit, DA fit) were practically and statistically significantly related to the three dimensions of EWB, six dimensions of PWB, and five dimensions of SWB, ranging from medium to large effects. PE fit dimensions were practically and statistically significantly related to job satisfaction (EWB), autonomy satisfaction (PWB), and social actualisation (SWB) with a large effect.

The majority of flourishing dimensions were practically and statistically significantly related to intention to leave with a large effect, except for negative affect (0.46), competence satisfaction (-0.43), meaning (-0.48), and learning (-0.48). The majority of flourishing dimensions were practically and statistically significantly related to in-role performance with a medium effect, except for negative affect (-0.29) and competence satisfaction (0.28). The majority of flourishing dimensions were practically and statistically significantly related to organisational citizenship behaviour (to co-workers) with a medium effect, as well as organisational citizenship behaviour (to organisation), ranging from medium to large effects.

Table 4

Descriptive Statistics, Reliabilities and Correlation Coefficients

Variable	<i>M</i>	<i>SD</i>	ρ	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 Person-organisation fit	5.14	1.48	0.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Needs-supplies fit	4.89	1.42	0.92	0.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Demands-abilities fit	5.85	0.95	0.81	0.52	0.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Positive affect	4.40	1.05	0.83	0.47	0.58	0.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 Negative affect	2.90	1.16	0.75	-0.38	-0.47	-0.38	-0.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Job satisfaction	4.01	1.25	0.90	0.50	0.62	0.51	0.80	-0.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Autonomy satisfaction	4.29	1.26	0.80	0.50	0.61	0.50	0.68	-0.55	0.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Competence satisfaction	4.83	0.92	0.88	0.36	0.44	0.36	0.49	-0.39	0.52	0.55	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Relatedness satisfaction	4.09	1.15	0.85	0.43	0.52	0.43	0.58	-0.47	0.62	0.66	0.47	-	-	-	-	-	-	-	-	-	-	-	-
10 Meaning	4.59	1.21	0.91	0.39	0.48	0.40	0.54	-0.43	0.57	0.61	0.44	0.52	-	-	-	-	-	-	-	-	-	-	-
11 Engagement	4.75	0.97	0.89	0.49	0.60	0.49	0.67	-0.54	0.71	0.75	0.54	0.65	0.60	-	-	-	-	-	-	-	-	-	-
12 Learning	4.61	0.96	0.81	0.40	0.49	0.40	0.54	-0.44	0.58	0.61	0.44	0.53	0.49	0.60	-	-	-	-	-	-	-	-	-
13 Social contribution	4.51	1.16	0.84	0.43	0.52	0.43	0.58	-0.47	0.62	0.62	0.44	0.53	0.49	0.61	0.49	-	-	-	-	-	-	-	-
14 Social integration	4.30	1.29	0.91	0.49	0.60	0.49	0.66	-0.54	0.71	0.70	0.51	0.60	0.56	0.69	0.56	0.75	-	-	-	-	-	-	-
15 Social actualisation	3.69	1.34	0.89	0.50	0.61	0.51	0.68	-0.55	0.73	0.72	0.52	0.62	0.57	0.71	0.58	0.76	0.87	-	-	-	-	-	-
16 Social acceptance	4.18	1.23	0.91	0.42	0.52	0.43	0.58	-0.47	0.62	0.61	0.44	0.53	0.49	0.60	0.49	0.65	0.74	0.76	-	-	-	-	-
17 Social coherence	4.06	1.29	0.92	0.47	0.58	0.48	0.65	-0.52	0.69	0.69	0.49	0.59	0.54	0.68	0.55	0.73	0.83	0.85	0.73	-	-	-	-
18 In-role performance	6.21	0.73	0.81	0.30	0.37	0.30	0.36	-0.29	0.39	0.38	0.28	0.33	0.30	0.38	0.31	0.33	0.38	0.39	0.33	0.37	-	-	-
19 OCB co-workers	5.29	1.14	0.80	0.27	0.33	0.27	0.34	-0.28	0.37	0.36	0.26	0.31	0.29	0.36	0.29	0.31	0.36	0.36	0.31	0.35	0.35	-	-
20 OCB organisation	5.42	1.16	0.85	0.39	0.48	0.39	0.49	-0.40	0.53	0.52	0.38	0.45	0.41	0.51	0.42	0.45	0.51	0.53	0.45	0.50	0.51	0.68	-
21 Intention to leave	2.81	1.29	0.91	-0.56	-0.68	-0.56	-0.57	0.46	-0.61	-0.60	-0.43	-0.52	-0.48	-0.59	-0.48	-0.52	-0.59	-0.61	-0.52	-0.58	-0.20	-0.22	0.32

All correlations are statistically significant ($p < 0.01$) **

Correlation is practically significant $r \geq 0.30$ (medium effect) Correlation is practically significant $r \geq 0.50$ (large effect)

Testing the Structural Model

A structural model (Model 6) was specified and tested based on the best fitting measurement model (Model 1). Given the cross-sectional nature of the data, two competing models, Models 6a and 6b, were tested to determine comparable fit with Model 6, as recommended by Hancock and Mueller (2010). The fit statistics of the three models are presented in Table 5.

Table 5

Goodness-of-Fit Statistics of Competing Structural Models

Model	χ^2	df	p	TLI	CFI	RMSEA		WRMR
						Est	90% CI	
6	4668.462*	2313	0.00	0.93	0.93	0.06	[0.060 0.065]	1.62
6a	10761.737*	2314	0.00	0.73	0.75	0.12	[0.117 0.121]	3.31
6b	4691.298*	2316	0.00	0.93	0.93	0.06	[0.060 0.066]	1.64

χ^2 , chi-square statistic; *df*, degrees of freedom; TLI, Tucker-Lewis index; CFI, comparative fit index; RMSEA, root mean square error of approximation; WRMR, weighted root mean square residual

The WLSMV estimator was used in the above calculations, taking into account the skewness and kurtosis of frequencies. Accordingly, the chi-square values for WLSMV cannot be used for chi-square difference testing in the regular way (Satorra & Bentler, 2010). Consequently, the Difftest option in Mplus was used for difference testing. Table 6 below shows the difference testing for the competing structural models and indicates Model 6b as the best fitting competing structural model.

Table 6

Difference Testing for Competing Structural Models

Model	$\Delta\chi^2$	Δdf	p
Model 6a	277.888	1	<0.0001**
Model 6b	23.568	3	<0.0001**

* $p < .05$; ** $p < .01$

Figure 1 shows the standardised path coefficients estimated by Mplus 7 (Muthén & Muthén, 1998-2016) for Model 6.

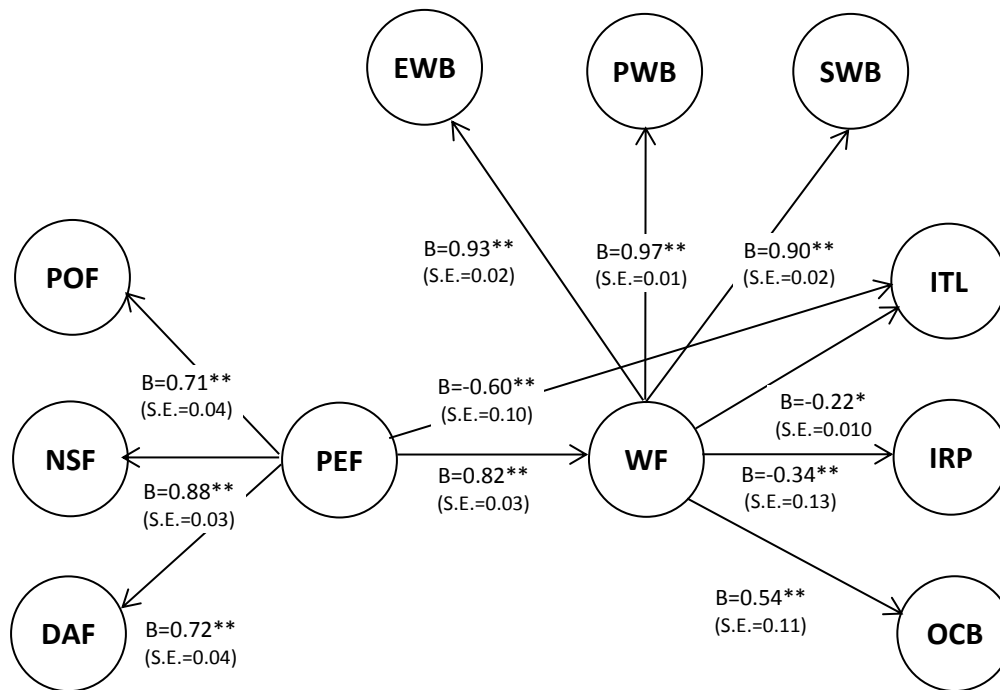


Figure 1. The structural model – standardised solution with standard errors in parentheses (*, $p < 0.05$; **, $p < 0.01$).

Figure 1 shows the standard path coefficients found with PEF as independent variable and WF, ITL, IRP, and OCB as dependent variables; and also WF as independent variable with ITL, IRP, and OCB as dependent variables.

For the portion of the model that predicts workplace flourishing (WF), Figure 1 shows that the path coefficient of person-environment fit (PEF) ($\beta = 0.82$; $p = < 0.01$) was statistically significant and had the expected sign. Based on these results, support was found for Hypothesis 1.

For the portion of the model that predicts intention to leave (ITL), the path coefficients of PEF ($\beta = -0.60$; $p = < 0.01$) and workplace flourishing (WF) ($\beta = -0.22$; $p = < 0.05$) were statistically significant and had the expected sign. Based on these results, support was found for Hypothesis 2.

For the portion of the model that predicts in-role performance (IRP), the path coefficient of workplace flourishing (WF) ($\beta = 0.34$; $p = < 0.01$) was statistically significant and had the expected sign. Based on these results, support was found for Hypothesis 3.

For the portion of the model that predicts organisational citizenship behaviour (OCB), the path coefficient of workplace flourishing (WF) ($\beta = 0.54$; $p = < 0.01$) was statistically significant and had the expected sign. Based on these results, support was found for Hypothesis 4.

In terms of effect sizes (Cohen, 1988), the indirect effects model accounted for the following percentages of variance explained (R^2): workplace flourishing = 67% (large effect), intention to leave = 62% (large effect), in-role performance = 21% (medium effect), and organisational citizenship behaviour = 40% (large effect).

Testing Indirect Effects

To determine whether person-environment fit indirectly affected intention to leave, in-role performance, and organisational citizenship behaviour, the author used the procedure as explained by Hayes (2009). Bootstrapping was used to construct two-sided bias-corrected 95% confidence intervals (CIs) to evaluate indirect effects.

Table 7

Indirect effect of Person-environment Fit on Intention to Leave, In-role Performance, and Organisational Citizenship Behaviour via Workplace Flourishing

Variable	Estimate	SE	<i>p</i>	95% BC CI
Indirect effect on intention to leave	-0.18	0.12	0.12	[-0.33, 0.23]
Indirect effect on in-role performance	0.28	0.12	0.02	[0.05, 0.55]
Indirect effect on organisational citizenship behaviour	0.44	0.13	0.00	[0.21, 0.68]

SE, standard error; BC CI, bias-corrected confidence interval.

Table 7 shows the indirect effect of person-environment fit on intention to leave, in-role performance, and organisational citizenship behaviour. Person-environment fit had a statistically significant indirect effect ($p = < 0.05$) on in-role performance and organisational citizenship behaviour ($p = < 0.01$) via workplace flourishing. Person-environment fit did not have a statistically significant indirect effect ($p = > 0.05$) on intention to leave via workplace flourishing. Based on these results, support was found for Hypothesis 6 and 7. No support was, however, found for Hypothesis 5.

Discussion

The aim of this study was to investigate relationships between person-environment fit, workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour. When teachers fit, feel well, and function well both psychologically and socially, positive outcomes ensue (i.e. lower intention to leave, higher in-role performance and OCB).

The knowledge of a construct is only as good as the measure used in its examination (Dietz & Den Hartog, 2006). Results confirmed the three-factor structure of workplace flourishing as previously established by Rautenbach and Rothmann (in press), confirming its construct validity beyond the fast-moving consumer goods (FMCG) industry. Flourishing at work consisted of emotional well-being (job satisfaction, positive affect and low negative affect), psychological well-being (autonomy satisfaction, competence satisfaction, relatedness satisfaction, meaning, engagement and learning), and social well-being (social contribution, social integration, social actualisation, social acceptance and social coherence). Furthermore, similar to Rautenbach and Rothmann (in press), all the dimensions of the FAWS yielded acceptable reliability coefficients, ranging from 0.75 to 0.92. This shows promising results for the use of the FAWS in future research.

The results indicated that PE fit is positively related to workplace flourishing. When employees experience higher levels of perceived fit with their work environment, they should also experience higher levels of work-related well-being. Therefore, when employees perceive high congruence between their personal values and organisational values, between the rewards they receive in return for the services they provide, and congruence between the demands of their job and their abilities, they ought to experience increased emotional, psychological, and social well-being in the work context.

Although the association between PE fit and workplace flourishing has not been studied before, the results are consistent with the theory of work adjustment (Dawis & Lofquist, 1984), the attraction-selection-attrition theory (Schneider, 1987), and other PE fit theories (e.g. Cable & DeRue, 2002) that indicate that when congruence is achieved between the employee and the work environment, positive outcomes ensue. The results also support the notion of cognitive appraisal theories of emotion (Roseman et al., 1990; Scherer, 1999) that cognitive circumstantial evaluations yield affective responses, and social identity theory (Tajfel & Turner, 1986) that proposes that employees who experience fit with their organisation's values become part of a 'psychological group'.

In terms of the relationship between workplace flourishing and intention to leave, the current study found a negative correlation. Numerous theories suggest that elements of workplace flourishing relate to intention to leave. Lee and Mitchell's (1994) unfolding model of voluntary turnover (UMVT), as well as Mobley's (1977) turnover model suggests that when employees are not satisfied with their jobs, they will start to explore other possibilities through a range of evaluation processes. Additionally, job embeddedness theory (Mitchell et al., 2001) suggests that links affect employee retention decisions. When employees have close links with their colleagues (which could be indicative of social well-being and relatedness), the sacrifice in leaving the organisation would be much more significant. Therefore, when employees flourish in the workplace, they will be less likely to contemplate leaving their current jobs. This is consistent with previous research findings (Diedericks & Rothmann, 2014; Rothmann, 2013).

In terms of the relationship between workplace flourishing, in-role performance, and OCB, the current study found a positive correlation. The flourishing-performance relationship can be explained by numerous theories. The happy/productive worker thesis suggests that happy (predominantly measured by job satisfaction) employees are productive employees. Quantitative and qualitative reviews of the job satisfaction-job performance relationship have also shown that job satisfaction effectively predict job performance (Judge et al., 2001). Other studies have also shown that PWB predicts job performance (Cropanzano & Wright, 2001), while EWB, PWB, and SWB negatively predicts counterproductive work behaviour (Diedericks & Rothmann, 2014). Furthermore, social exchange theory (Blau, 1964) suggests that employees who perceive that their organisation contributes significantly to their work-related well-being, should increase their helping behaviours towards the organisation. In this

regard, the same principle applies to colleagues. Therefore, when employees function emotionally, psychologically, and socially well at work, it should have a positive effect on both their in-role (according to job requirements) and extra-role (in addition to job requirements) performance. This is consistent with previous research findings (Diedericks & Rothmann, 2014; Rothmann, 2013).

In terms of the indirect effect of PE fit on intention to leave via workplace flourishing, results did not confirm the indirect effect. Results showed that the relationship between PE fit and intention to leave is a direct one, suggesting that PE fit decreases participant intent to leave, regardless of the flourishing levels of participants. This could be interpreted by the ASA model (Schneider, 1987), which suggests that when employees do not experience congruence with their work environment, they will be more likely to leave. Similarly, workplace flourishing had a significant impact on intention to leave, regardless of the PE fit levels of employees. Thus, PE fit and workplace flourishing, both in their own right and independent of each other, significantly predicted teachers' thoughts of leaving their organisation. Job embeddedness theory suggests that employees' retention decisions are influenced by links, fit, and sacrifice (Mitchell et al., 2001). In the current context, as teachers experience fit with their school and aspects of their jobs, and experience links within the organisation (e.g. social integration), they have much more to sacrifice when leaving the school, resulting in lower intention to leave.

In terms of the indirect effect of PE fit on in-role performance and OCB via workplace flourishing respectively, results confirmed the indirect effect. Therefore, the relationship between PE fit and in-role performance and OCB is not a direct one, suggesting that PE fit increases participant performance (in-role and extra-role), as long as levels of participant flourishing remain sufficiently high. Consequently, PE fit must first increase levels of flourishing in order to subsequently increase in-role performance and OCB. Although the preceding associations have not been studied before, they seem consistent with Fishbein and Ajzen's (1975) framework which contends that beliefs precede attitudes, intentions, and ultimately behaviours.

Various study limitations should be noted. Firstly, the use of a cross-sectional design hinders the determination of causal relationships amongst the study variables. Secondly, the use of self-reported measures may lead to "common method variance". Thirdly, due to the

restrictions in terms of occupation and geographical location, for instance, the generalisation of findings to other contexts should be done cautiously. Lastly, the relatively small sample size can be seen as a limitation.

Recommendations

Despite the various noted limitations, various recommendations can be made for the respective schools' management. It is imperative for schools to comprehend the impact of PE fit on the work-related well-being and other outcomes of employees, as all role players are affected equally by its implications. Proactively, in the recruitment and selection process of teachers, schools should incorporate PE fit as one of the critical parts of the selection criteria against which candidates are assessed. Positive outcomes will ensue when the right candidates are selected in congruence with the school's values and offerings. Schools should also strive to create an inclusive environment where employees feel a sense of belonging and integration, an environment where employees feel that their needs are attended to, and an environment that fosters factors such as learning, individual expression, and positivity. When such an environment is created, teachers should be healthy at work, productive, loyal, and go beyond what is expected of them, thus creating the best possible scenario for the individual (teacher), the school, and the learners.

In terms of recommendations for future research, future studies should aim to expand the population beyond the restrictions placed on the current study. Future studies should also aim to assess the causality between constructs, as none of the constructs is static in nature.

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CHAPTER 3

RESEARCH ARTICLE 2

Validation of the Flourishing-at-Work Scale – Short Form

Abstract

The first aim of the study was to assess the reliability and validity of the Flourishing-at-Work Scale – Short Form. The second aim was to assess the prevalence of workplace flourishing and to investigate differences in the perceived flourishing levels of teachers based on the positive practices they experience in the school environment. A cross-sectional survey design was used with a sample of 258 secondary school teachers in Gauteng. The Flourishing-at-Work Scale – Short Form, Turnover Intention Scale, In-Role Behaviour Scale, Organisational Citizenship Behaviour Scale, and the Positive Practices Questionnaire were administered. The results showed acceptable psychometric properties for the short scale which measures flourishing. Workplace flourishing was negatively related to intention to leave, and positively related to in-role performance and organisational citizenship behaviour. A total of 44.19% of the population flourished, while 49.22% were moderately mentally healthy, and 6.59% languished. Positive organisational practices were associated with flourishing at work.

Keywords: Flourishing, intention to leave, in-role performance, organisational citizenship behaviour, positive practices

Being a teacher may make one more inclined to experience ill health and un-well-being (Jackson, Rothmann, & Van de Vijver, 2006), as education ranks among the top ten most stressful and toughest occupations (Hayward, 2009; Kyriacou, 2001). Teachers are faced with a wide array of challenging demands, including difficult parent interactions, negative work environments, insufficient remuneration, unfulfilled interpersonal relationships with colleagues, and ever-increasing administrative burdens (Clunies-Ross, Little, & Kienhuis, 2008; Jackson et al., 2006; Klassen, Usher, & Bong, 2010). Despite these demands, teachers are often so entangled with the difficulties experienced by learners that the development of their own strengths and qualities is side-lined (Hammett & Staeheli, 2009). This is problematic, as the enhancement of positive attributes and strengths of teachers promises positive outcomes for all stakeholders (Luthans, Norman, Avolio, & Avey, 2008). Therefore, steps should be taken to ensure that they are healthy and functioning well at work.

Good quality measures are a prerequisite for the scientific study of flourishing in the workplace (Huppert & So, 2013; Rothmann, 2013). As workplace flourishing is new to the area of measurement, it is important to further examine the psychometric properties of the Flourishing-at-Work Scale – Short Form (FAWS-SF), to ensure that valid and reliable inferences can be made across various industries and population groups. Being the first validated instrument to measure a model of flourishing versus languishing at work (Rautenbach & Rothmann, in press-b), the FAWS-SF could supply organisations with invaluable information regarding the well-being of their employees. When organisations are aware of the factors that impede the well-being of their employees, they can more purposefully direct interventions at the identified problems. Similarly, when organisations are aware of the factors that promote well-being among employees, they can more purposefully develop policies and procedures to foster health promotion. Valid and reliable information regarding the holistic well-being of employees could enable organisations to effectively manage employee health and functioning, which should pave the way for organisational excellence.

The prevalence of positive mental health has been less satisfactory, drawing from studies conducted in the United States of America (Keyes, 2002; Keyes, Dhingra, & Simoes, 2010) and South Africa (Diedericks & Rothmann, 2014; Khumalo, Temane, & Wissing, 2012; Swart & Rothmann, 2012). Therefore, it is vital to investigate the factors associated with workplace flourishing and outcomes such as intention to leave and performance, to illustrate

the importance of managing work-related well-being. Although the preceding constructs have been studied in relation to workplace flourishing before (Redelinghuys, Rothmann, & Botha, in press), they are yet to be examined with the FAWS-SF.

Another research gap is that no previous studies have examined the full spectrum of positive practices in relation to workplace flourishing. Assessing positive practices is important as organisational practices have been shown to affect individual well-being (Gittell, Cameron, Lim, & Rivas, 2006). Unfortunately, previous studies have only assessed isolated accounts of flourishing and positive practices, which only partly explain how these constructs relate to one another. Detailed information regarding the organisational factors that affect employee well-being can assist organisations in creating a more positive work environment – an environment where employees can flourish.

Flourishing at Work

The development of a psychometrically sound measure starts with the conceptualisation and formulation of a theoretically-grounded construct (Anastasi, 1986; Clark & Watson, 1995; Dawis, 1987). Flourishing at work is defined as an employee's desirable condition or state of well-being, achieved through positive experiences and effective management of work-related factors (Rautenbach & Rothmann, in press-b). Despite ongoing inconsistencies with regard to which factors should be incorporated into a valid, measurable well-being theory (Diener, Scollon, & Lucas, 2003), the diverse nature of well-being cannot be disregarded in the development of new measures (Gasper, 2004). The multidimensionality of workplace flourishing is illustrated in Table 1.

Table 1

Flourishing at Work

Dimension	Sub-dimension	Description
EWB	Job satisfaction	Enjoys or dislikes the job.
	Positive affect	Feels pleased, regularly cheerful, serene, and good-spirited.
PWB	Autonomy	Satisfaction of the desire to (subjectively) experience freedom and choice when carrying out tasks.
	Competence	Satisfaction of the desire to feel effective in interacting with the environment.
	Relatedness	Satisfaction of individuals' needs to feel connected to others, to love and care for others, and to be loved and cared for.
	Meaning	Experiences work as meaningful, understands how work contributes to life's meaning, and senses what makes a job worthwhile.
	Purpose	Feels that the work makes a difference in the world and serves a greater purpose.
	Cognitive engagement	Being alert at work and experiencing absorption and involvement.
	Emotional engagement	Being connected to job/others while working and showing dedication and commitment.
SWB	Physical engagement	Being physically involved in a task and showing vigour.
	Learning	Perceives that one is acquiring and can apply knowledge and skills to one's work.
	Social acceptance	Positive attitude towards others and acceptance of diversity in the organisation.
	Social actualisation	Believes in potential of others (individuals, groups and organisations).
	Social contribution	Regards own daily activities as adding value to the organisation and to others.
	Social coherence	Finds the organisation and social life meaningful and comprehensible.
Social integration	Experiences sense of relatedness, comfort and support from the organisation.	

Adapted from Rautenbach & Rothmann (in press-b)

Outcomes of Workplace Flourishing

Although intention to leave, in-role performance, and organisational citizenship behaviour have been identified as outcomes of workplace flourishing (Redelinguys et al., in press), it should be noted that these relationships were established with the standard form of the Flourishing-at-Work Scale (FAWS; Rautenbach & Rothmann, in press-a). Numerous studies suggest that the use of shorter measuring instruments is more desirable as it alleviates the burden placed on participants (Netemeyer, Boles, & McMurrian, 1996; Stephens & Sommer, 1996).

In addition to the FAWS, Rautenbach and Rothmann (in press-b) also developed a shorter version (FAWS-SF) with which they tested antecedents of workplace flourishing. In their study, they established acceptable psychometric properties for the FAWS-SF, confirming the three-factor structure of workplace flourishing as previously established. Furthermore, they found that workplace flourishing was best predicted by advancement, negative work-home interaction (inverse), and authentic leadership; while workload, job insecurity, and remuneration did not have a significant impact on workplace flourishing. Outcomes associated with the FAWS-SF are yet to be examined. Therefore, in order to further assess the psychometric properties of the FAWS-SF, the current study specifically focused on outcomes related to workplace flourishing.

Intention to leave refers to an employee's cognisant and intentional frame of mind to part ways with his or her organisation (Tett & Meyer, 1993). Talent retention is a major challenge facing educational institutions (Janik & Rothmann, 2015). Within the South African context, educator attrition exceeds replenishing rates (Crouch, 2002; Steyn, 2006). International research has shown that 46% of educators part ways with the teaching profession within five years of entry (Jalongo & Heider, 2006). Therefore, information regarding antecedents of intention to leave can assist organisations in rectifying the conditions that provoke thoughts of departure (Costigan, Insinga, Berman, Kranas, & Kureshov, 2011).

In-role performance refers to the activities an employee is expected to fulfil as stipulated in his or her formal job requirements (Borman & Motowidlo, 1997; Williams & Anderson, 1991). Low teacher effort, underqualified teachers, and low performance are serious challenges faced by the South African school system (Fouché, Rothmann, & Van der Vyver,

in press; Van der Berg et al., 2011). Accurately identifying the underlying aspects of low teacher performance in South Africa and addressing them could be of monumental value to society.

OCB refers to employee behaviour that contributes beyond what is expected in the inherent job requirements (Lambert, 2006). Within the educational context, OCB is defined as teachers' voluntary helping behaviours towards students, colleagues, and management (DiPaola, Tarter, & Hoy, 2004). School success is dependent on the willingness of teachers to exceed role expectations (DiPaola & Tschannen-Moran, 2001).

The relationship between workplace flourishing, intention to leave, in-role performance, and OCB has only been examined in one study. In a cross-sectional study regarding the flourishing of teachers, Redelinguys et al. (in press) argued that numerous theories, such as job embeddedness theory (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001), the happy/productive worker thesis, employee turnover models (Lee & Mitchell, 1994; Mobley, 1977), and social exchange theory (Blau, 1964) could be used to explain how workplace flourishing predicts the aforementioned outcomes. Results from their study showed that workplace flourishing significantly predicted intention to leave, in-role performance, and OCB. Therefore, when employees experience emotional, psychological, and social well-being in the workplace they are less inclined to contemplate leaving their organisation and they perform better, both within and beyond the confines of their job description (Redelinguys et al., in press).

Based on the preceding discussion, the current study posits the following hypotheses:

Hypothesis 1: Workplace flourishing is a multidimensional construct, consisting of emotional, psychological, and social well-being.

Hypothesis 2: The Flourishing-at-Work Scale – Short Form is a reliable measuring instrument.

Hypothesis 3: Workplace flourishing is negatively related to intention to leave.

Hypothesis 4: Workplace flourishing is positively related to in-role performance.

Hypothesis 5: Workplace flourishing is positively related to organisational citizenship behaviour.

Prevalence of Flourishing

Workplace flourishing can be classified according to three categories: flourishing, moderately mentally healthy, and languishing. To be diagnosed as flourishing at work, employees must experience at least one of the three signs of EWB and at least eight of the 14 signs of PWB and SWB ‘every day’ or ‘almost every day’. Employees who display at least one of the three signs of EWB and at least eight of the 14 signs of PWB and SWB ‘never’ or ‘once or twice’ are diagnosed as languishing at work. Employees who do not fit the criteria for flourishing or languishing are seen as moderately mentally healthy (Rautenbach & Rothmann, in press-b).

In a South African context, Diedericks and Rothmann (2014) found in a sample of 205 information technology professionals that 37.6% of participants were flourishing, 58.5% were moderately mentally healthy, and 3.9% were languishing. In a study conducted among the adult population in the North West Province, Khumalo et al. (2012) established that 20% of the participants were flourishing, 67.8% were moderately mentally healthy, and 12.2% were languishing. Within a managerial context, Swart and Rothmann (2012) established that 48.5% of the participants were flourishing, 48.5% were moderately mentally healthy, and 3% were languishing. Boshoff, Potgieter, Van Rensburg, and Ellis (2014) established among 200 black secondary school teachers in the North West Province that 28% were flourishing, 70.5% were moderately mentally healthy, and 1.5% were languishing. Applying criteria of flourishing at work, Rothmann (2015) reported that 35.9% of 779 employees in an organisation in South Africa flourished, while 8% languished. Similarly, Rautenbach and Rothmann (in press-b) established that 34.9% of employees in the fast-moving consumer goods (FMCG) industry flourished, while 65.15% were moderately mentally healthy, and 8% languished.

Positive Practices

The concept of positive organisational practices stems from positive organisational scholarship (POS) – which strives to uncover which positive capabilities and activities could lead to flourishing in organisational contexts (Cameron, Dutton, & Quinn, 2003). Practices refer to collective behaviours or activities which are advocated by and characteristic of an organisation (Cameron, Mora, Leutscher, & Calarco, 2011). They do not represent emotions or climate, but rather assume a behavioural orientation (Cameron et al., 2011). The list of

positive practices was not derived from overarching theory; they were selected based on their appearance in previous research, their representation of behavioural practices or activities, as well as their possession of at least one of the three connotations of positive deviance, virtuous practices, and/or affirmative bias (Cameron et al., 2011). Consequently, six dimensions of positive practices emerged, namely caring, compassionate support, forgiveness, inspiration, meaning, as well as respect, integrity, and gratitude (Cameron et al., 2011). These are illustrated in Table 2.

Table 2
Positive Practices

Dimension	Description
Caring	Care, interest, and responsibility towards one another as friends.
Compassionate support	Support, kindness, and compassion towards those who are struggling.
Forgiveness	Avoiding blaming, forgiving mistakes, and not holding grudges.
Inspiration	Setting positive examples and inspiring one another at work.
Meaning	Meaningfulness of the work is emphasised, where people are elevated and renewed by their work.
Respect, integrity, and gratitude	Respect and appreciation towards one another. Exhibiting trust and maintaining integrity.

Adapted from Cameron et al. (2011)

When positive practices are engrained in the organisational environment, employees experience increased positive affect (e.g. satisfaction) and positive behaviour (e.g. engagement), which significantly contributes to the profitability and performance of the organisation (Cameron et al., 2011; Lyubomirsky, King, & Diener, 2005). In terms of social well-being, research suggests that the observation of positive practices among colleagues may kindle improved fondness, commitment, participation, trust, and teamwork (Koys, 2001; Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Walz & Niehoff, 2000). It can therefore be concluded that a positive work environment plays a decisive role in the flourishing of employees in the workplace.

Within a South African context, Rautenbach and Rothmann (in press-c) established that three positive practices, namely positive emotions, support, and inspiration were associated with workplace flourishing. Thus, as the level of flourishing increases, so does the likelihood that positive practices would play a statistically significant role. However, in their study they recommended that the full spectrum of positive practices (Cameron et al., 2011) should be assessed in relation to workplace flourishing. Fouché et al. (in press) assessed the full spectrum of positive practices in relation to the psychological well-being of secondary school teachers in the North West Province. They found that two positive practices, namely meaning and inspiration, were associated with psychological well-being. Therefore, when employees experienced their workplace as meaningful and inspiring, they were more inclined to experience enhanced levels of positive functioning, characterised by autonomy, competence, relatedness, work engagement, and meaningful work. However, psychological well-being constitutes just a single dimension of workplace flourishing. It is therefore vital to honour the multidimensionality of workplace flourishing and positive practices as the preceding studies only partially explained how these constructs relate to each other.

Based on the preceding discussion, the current study posits the following hypothesis:

Hypothesis 6: There are statistically significant differences between the levels of flourishing and positive practices.

Aims

The first aim of the study was to assess the reliability and validity of the Flourishing-at-Work Scale – Short Form (FAWS-SF) in relation to intention to leave, in-role performance, and organisational citizenship behaviour. The second aim was to assess the prevalence of workplace flourishing and to investigate differences in the perceived flourishing levels of teachers based on the positive practices they experience in the school environment.

Method

Research Design

A cross-sectional research approach was utilised. According to Salkind (2009), a cross-sectional method allows the researcher to examine various groups of individuals during a single point in time.

Participants

A cross-sectional survey research design was conducted among academic personnel at secondary schools in Gauteng. A total of 800 questionnaires were distributed, of which 258 were completed satisfactory, accounting for a response rate of 32%. Sample characteristics are provided in Table 3 below.

Table 3

Characteristics of the Participants (N = 258)

Item	Category	Frequency	Percentage (%)
Gender	Male	62	24.0
	Female	190	73.6
	Missing values	6	2.3
Racial group	African	48	18.6
	Coloured	2	0.8
	Indian	9	3.5
	White	192	74.4
	Other	1	0.4
	Missing values	6	2.3
	Marital Status	Single	45
	Living with partner	18	7.0
	Married	158	61.2
	Divorced	18	7.0
	Widowed	4	1.6
	Missing Values	15	5.8
Highest level of education	Grade 12	4	1.6
	Diploma	39	15.1
	Degree	115	44.6
	Postgraduate degree	94	36.4
	Missing values	6	2.3
Job position	Teacher	204	79.1
	Head of department	30	11.6
	Vice-principal	10	3.9
	Principal	6	2.3
	Missing values	8	3.1

The majority of participants were female (73.6%), white (74.4%), married (61.2%), and teachers (79.1%). Almost half of the participants possessed a degree (44.6%), while 36.4% possessed a postgraduate degree, 15.1% a diploma, and 1.6% a Grade 12 certificate.

Measuring Instruments

The following measuring instruments were used in the empirical study:

Workplace flourishing was measured with the *Flourishing-at-Work Scale – Short Form* (FAWS-SF; Rautenbach & Rothmann, in press-a). The FAWS-SF consists of the 17 most archetypal items expressive of the construct, scored on a six-point scale ranging from 1 (*never*) to 6 (*every day*). The FAWS-SF encompasses three dimensions: emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB). EWB comprises two dimensions, namely positive affect (measured by two items) (“During the past month at work, how often did you feel happy?”; “During the past month at work, how often did you feel grateful?”), and job satisfaction (“During the past month at work, how often did you experience satisfaction with your job?”). PWB comprises nine dimensions, namely autonomy (“During the past month at work, how often did you feel confident to think or express your own ideas and opinions?”), competence (“During the past month at work, how often did you feel good at managing the responsibilities of your job?”), relatedness (“During the past month at work, how often did you feel really connected with other people at your job?”), meaning (“During the past month at work, how often did you feel that you understand how your work contributes to your life’s meaning?”), purpose (“During the past month at work, how often did you feel that the work you do serves a greater purpose?”), cognitive engagement (“During the past month at work, how often did you focus a great deal of attention on your work?”), emotional engagement (“During the past month at work, how often did you get excited when you perform well on your job?”), physical engagement (“During the past month at work, how often did you feel energised when you work?”), and learning (“During the past month at work, how often did you find yourself learning?”). SWB comprises five dimensions, namely social contribution (“During the past month at work, how often did you feel you are a key member of this school?”), social acceptance (“During the past month at work, how often did you feel that people in your school are basically good?”), social actualisation (“During the past month at work, how often did you feel that your school is becoming a better place for people like you?”), social integration (“During the past month at work, how often did you feel that you really belong to your school?”), and social coherence (“During the past month at work, how often did you feel that the way your school works, makes sense to you?”). Internal consistencies ranging from 0.82 to 0.90 have been established (Rautenbach & Rothmann, in press-b).

Intention to leave was measured with the *Turnover Intention Scale* (TIS; Sjöberg & Sverke, 2000). The TIS consists of three items scored on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Encompassing a single dimension, a sample item of the scale includes: “I am actively looking for other jobs”. Sjöberg and Sverke (2000) reported a Cronbach alpha coefficient of 0.83 for the scale. Within a South African context, Redelinghuys and Botha (2016) established a reliability coefficient of 0.90.

In-role performance was measured with the *In-Role Behaviour (IRB) Scale* (Williams & Anderson, 1991). The IRB scale consists of seven items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Encompassing a single dimension, a sample item of the scale includes: “I perform tasks that are expected of me”. The items were formulated in a manner which enabled employees to rate their own performance, as external evaluation was prohibited. Williams and Anderson (1991) reported a Cronbach alpha coefficient of 0.91 for the scale.

Organisational citizenship behaviour was measured with the *Organisational Citizenship Behaviour Scale* (OCBS; Rothmann, 2010). The OCBS consists of six items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The OCBS encompasses two dimensions, namely assistance to co-workers, and assistance to the organisation. Assistance to co-workers in the organisation was measured with three items (e.g. “I give up time to help co-workers who have work or non-work problems”). Assistance to the organisation was also measured with three items (e.g. “I take action to protect the organisation from potential problems”). Cronbach alpha coefficients higher than 0.70 have been found (Diedericks & Rothmann, 2014).

Positive practices were measured with the *Positive Practices Questionnaire* (PPQ; Cameron et al., 2011). The PPQ consists of 29 items scored on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The PPQ encompasses six dimensions, namely caring, compassionate support, forgiveness, inspiration, meaning, as well as respect, integrity, and gratitude. Caring was measured with four items (e.g. “We are interested in each other”). Compassionate support was measured with seven items (e.g. “We show compassion for each other”). Forgiveness was measured by means of three items (e.g. “We forgive mistakes”). Inspiration was also measured by means of three items (e.g. “We inspire each other”). Meaning was measured with five items (e.g. “We are being renewed by what we do”).

Respect, integrity, and gratitude was measured with seven items (e.g. “We treat each other with respect”). The 29 items had in mind the organisation as the unit of analysis, not the individual respondent. Organisational attributes and activities were assessed, not individual behaviour or traits. Reliable Cronbach alpha coefficients have been established (Cameron et al., 2011). The Raykov’s rho coefficients for the scales ranged from 0.90 to 0.96 in the current study.

Research Procedure

To proceed with the study, research permission was obtained from the Gauteng Department of Education (GDE), the Sedibeng East and West District offices, as well as ethical clearance from the Ethics Committee at the North-West University’s Vaal Triangle Campus. Once the aforementioned permissions had been obtained from the necessary authorities, the researcher made contact with the principals of secondary schools in the selected districts. The researcher arranged dates and times with probable research participants at their respective schools to discuss the purpose of the study and to obtain informed consent. Hard copy questionnaires, with English as instructional language, were distributed to consenting participants; granting them a two week period to complete the questionnaires. Arrangements were made for participants to securely return their questionnaires, respecting their rights to privacy.

Statistical Analysis

Mplus 7.4 (Muthén & Muthén, 1998-2016) was employed to conduct statistical analysis. Descriptive statistics (e.g. means, standard deviations, skewness, and kurtosis) and inferential statistics (e.g. correlations) were utilised for data analysis. Raykov’s rho coefficients (Raykov, 2009) were used to assess the reliability of measuring instruments. Pearson product-moment correlation coefficients were used to measure the proposed relationships between the study variables. Effect sizes were used to determine the practical significance of the results (Cohen, 1988). A cut-off point of 0.30 (medium effect) and 0.50 (large effect) was set for the practical significance of the correlation coefficients (Cohen, 1988). The confidence interval level for statistical significance was set at a value of 95% ($p \leq 0.05$). Descriptive statistics were computed with SPSS23 (IBM Corp, 2016).

Using the maximum likelihood estimation with robust standard errors (MLR) indicator, a measurement model was specified and tested against numerous goodness-of-fit indices. In order to facilitate a comparative analysis, three competing measurement models were similarly specified and tested. The best-fitting model was re-specified as a structural model. The following Mplus indices were used in the study: the chi-square statistic, the standardised root mean residual (SRMR), the root mean square error of approximation (RMSEA), the Tucker-Lewis index (TLI), and the comparative fit index (CFI) (Hair, Black, Babin, & Andersen, 2010). CFI and TLI values of 0.90 and higher were regarded as acceptable. RMSEA and SRMR values of 0.08 and lower indicated close fit between the model and the data. In line with the recommendations of Wang and Wang (2012), non-nested models of flourishing were compared using the Akaike information criterion (AIC) and Bayes information criterion (BIC). Cohen's (1988) guidelines were used to assess the practical significance of the variances explained (R^2) in the structural model, acknowledging values lower than 0.09 as having a small effect, values lower than 0.25 a medium effect, and values higher than 0.25 a large effect.

Multivariate analysis of variance (MANOVA) in SPSS23 (IBM Corp, 2016) was used with factor scores computed in Mplus 7.4 to determine the significance of differences between the flourishing levels of employees and the positive practices they experience. MANOVA creates a new dependent variable that maximises group differences based on the set of dependent variables. Eta square (η^2) values were used to assess practical significance. One-way analysis was then performed on the newly created dependent variable. The Wilks' lambda statistic was used to test the significance of the effects (Tabachnick & Fidell, 2013). Significant effects in MANOVA were further examined through one-way analysis of variance (ANOVA), to determine which dependent variables had been affected. Lastly, Tukey tests were performed to investigate which groups differed significantly based on the ANOVAs.

Results

Testing the Measurement Model

Confirmatory factor analyses (CFA) were carried out with the used scales using the MLR estimator in Mplus 7.41 (Muthén & Muthén, 1998-2016). An initial measurement model (Model 1) was specified and tested for fit, while four competing models (Models 2-5) were similarly specified and tested to determine whether the initial measuring model represented the best-fitting model.

Model 1 consisted of four first-order latent variables, namely workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour. Workplace flourishing consisted of three latent variables, namely emotional well-being (measured by three observed variables), psychological well-being (measured by nine observed variables), and social well-being (measured by five observed variables). The other three latent variables were intention to leave (measured by three observed variables), in-role performance (measured by seven observed variables), and organisational citizenship behaviour. Organisational citizenship behaviour consisted of two latent variables, namely citizenship behaviour towards co-workers (measured by three observed variables) and citizenship behaviour towards the organisation (measured by three observed variables). All latent variables were correlated.

In Model 2, workplace flourishing consisted of two latent variables, namely feeling well (measured by three observed variables) and functioning well (measured by 14 observed variables). In Model 3, workplace flourishing consisted of one latent order variable (measured by 17 observed variables). In Model 4, organisational citizenship behaviour consisted of one latent variable (measured by six observed variables). In Model 5, workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour jointly consisted of one latent variable, namely well-being (measured by 33 observed variables).

Table 4 presents the goodness-of-fit statistics for the five competing measurement models described above.

Table 4

Goodness-of-Fit Statistics of Competing Measurement Models

Model	χ^2	df	TLI	CFI	RMSEA		SRMR	AIC	BIC
					Est	90% CI			
1	812.166*	449	0.90	0.91	0.06	[0.050 0.062]	0.07	22227.48	22621.86
2	1137.567*	485	0.83	0.85	0.07	[0.067 0.078]	0.07	23361.10	23748.37
3	1191.948*	487	0.82	0.83	0.08	[0.070 0.080]	0.07	23420.23	23800.39
4	1129.405*	480	0.83	0.85	0.07	[0.067 0.078]	0.07	23353.92	23758.95
5	2562.822*	495	0.48	0.51	0.13	[0.122 0.132]	0.12	25085.84	25437.58

χ^2 , chi-square statistic; *df*, degrees of freedom; TLI, Tucker-Lewis index; CFI, comparative fit index; RMSEA, root mean square error of approximation; SRMR, standardised root mean square residual; AIC, Akaike information criterion; BIC, Bayes information criterion

In Table 4 it is evident that Model 1 has the best statistical fit of the four models. A χ^2 of 812.166 was obtained for the initial measurement model. The fit indices for CFI and TLI were acceptable (> 0.90), as was the model fit for the RMSEA and SRMR (< 0.08). The AIC and BIC fit indices were used to compare alternative models and the initial model, with the lowest value indicating the best fit, which was Model 1 in this case. The BIC indicated that Model 1 had the most parsimonious fit of the compared models. From Table 4 it can thus be deduced that Model 1 fitted the data best. Therefore, Hypothesis 1 is accepted.

Descriptive Statistics and Product-Moment Correlations

The descriptive statistics and Raykov's rho coefficients of the measuring instruments, as well as the product-moment correlation coefficients between the constructs, are reported in Table 5.

From the results in Table 5 it can be seen that the Raykov's rho coefficients of all the measuring instruments were acceptable, except for the OCBS co-worker subscale (0.66) which fell marginally below the cut-off point. Raykov's rho coefficients share the same acceptable cut-off point as Cronbach alpha coefficients, acknowledging values of ≥ 0.70 as acceptable (Nunnally & Bernstein, 1994). The FAWS-SF illustrated good to excellent

reliability with a value of 0.92 for the full scale, and values ranging from 0.81 to 0.86 for the subscales. Therefore, Hypothesis 2 is accepted.

Furthermore, Table 5 provides the correlation coefficients of the study variables. Emotional well-being, psychological well-being, social well-being, and workplace flourishing were all practically and statistically significantly related to intention to leave with a large effect.

Emotional well-being, psychological well-being, social well-being, and workplace flourishing were all practically and statistically significantly related to in-role performance with a medium effect.

Emotional well-being, psychological well-being, social well-being, and workplace flourishing were all practically and statistically significantly related to organisational citizenship behaviour (to co-workers), with a medium effect, as well as organisational citizenship behaviour (to organisation), with a large effect.

Table 5

Descriptive Statistics, Reliabilities and Correlation Coefficients

	<i>M</i>	<i>SD</i>	ρ	1	2	3	4	5	6	7	8	9
1 Emotional well-being	3.38	1.07	0.81	1.00	-	-	-	-	-	-	-	-
2 Psychological well-being	3.08	1.19	0.85	0.83 ⁺⁺⁺	1.00	-	-	-	-	-	-	-
3 Social well-being	3.08	1.45	0.86	0.78 ⁺⁺⁺	0.81 ⁺⁺	1.00	-	-	-	-	-	-
4 Workplace flourishing	3.40	0.88	0.92	0.89 ⁺⁺⁺	0.93 ⁺⁺⁺	0.88 ⁺⁺	1.00	-	-	-	-	-
5 In-role performance	5.52	0.55	0.73	0.32 ⁺	0.34 ⁺	0.32 ⁺	0.36 ⁺	1.00	-	-	-	-
6 OCB (Co-worker)	5.29	1.14	0.66	0.41 ⁺	0.43 ⁺	0.41 ⁺	0.47 ⁺	0.32 ⁺	1.00	-	-	-
7 OCB (Organisation)	5.42	1.16	0.85	0.51 ⁺⁺⁺	0.53 ⁺⁺⁺	0.50 ⁺⁺⁺	0.57 ⁺⁺⁺	0.39 ⁺	0.64 ⁺⁺⁺	1.00	-	-
8 Organisational citizenship behaviour	5.35	0.99	0.77	0.57 ⁺⁺⁺	0.60 ⁺⁺⁺	0.56 ⁺⁺⁺	0.64 ⁺⁺⁺	0.44 ⁺	0.72 ⁺⁺⁺	0.88 ⁺⁺⁺	1.00	-
9 Intention to leave	2.81	1.29	0.91	-0.62 ⁺⁺⁺	-0.65 ⁺⁺⁺	-0.61 ⁺⁺⁺	-0.70 ⁺⁺⁺	-0.14 ^{**}	-0.25 ^{**}	-0.31 ⁺	-0.35 ⁺	1.00

* Statistically significant ($p \leq 0.05$) ** Statistically significant ($p \leq 0.01$)

+ Correlation is practically significant $r \geq 0.30$ (medium effect) ++ Correlation is practically significant $r \geq 0.50$ (large effect)

Figure 1 illustrates the mean scores of the total sample on the dimensions of workplace flourishing over the last month. The scale is as follows: 0 = Never, 1 = Once or twice, 2 = Once a week, 3 = About two or three times per week, 4 = Almost every day, 5 = Every day.

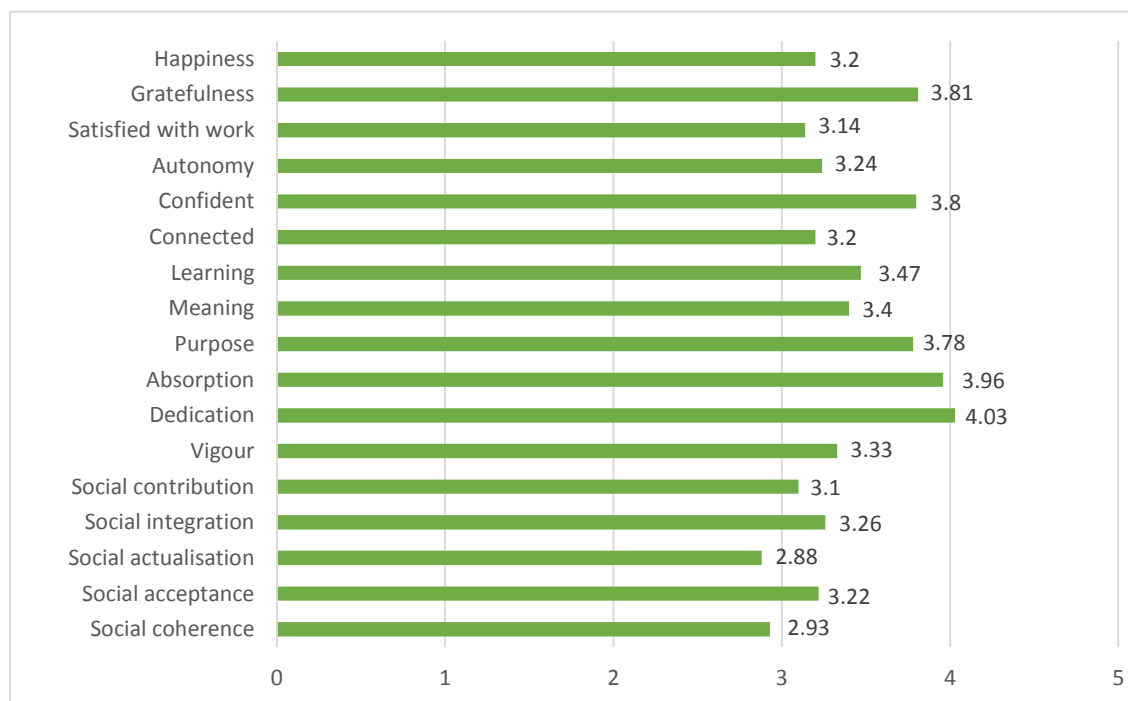


Figure 1. Mean frequencies on dimensions of workplace flourishing

Figure 1 shows that the lowest scores were obtained on social actualisation (2.88) and social coherence (2.93), while the highest scores were obtained on dedication (4.03) and absorption (3.96). The sample experienced the majority of the dimensions of workplace flourishing about two or three times per week.

To be classified as flourishing, employees had to experience at least one of the three signs of EWB and at least eight of the 14 signs of PWB and SWB ‘every day’ or ‘almost every day’. Employees who displayed at least one of the three signs of EWB and at least eight of the 14 signs of PWB and SWB ‘never’ or ‘once or twice’ were classified as languishing. Employees who did not fit the criteria for flourishing or languishing were seen as moderately mentally healthy. Prevalence rates are illustrated in Table 6.

Table 6

Prevalence of Workplace Flourishing (N = 258)

Classification	% of Total (N = 258)	SA ¹ - % of Total	SA ² - % of Total
Languishing	6.59	8.00	3.9
Moderately mentally healthy	49.22	65.15	58.5
Flourishing	44.19	34.9	37.6

¹ Rautenbach & Rothmann (in press-b) – Employees in fast-moving consumer goods industry

² Diedericks & Rothmann (2014) – Employees in information technology industry

Table 6 shows that almost half of the sample in the current study was moderately mentally healthy (49.22%), 44.19% flourished, while less than 10% languished (6.59%). Using the FAW-SF, Rautenbach and Rothmann (in press-b) showed that 34.9% of employees flourished, while 8% languished. Using the MHC-SF, Diedericks and Rothmann (2014) found that 37.6% of employees flourished, while 3.9% languished.

Testing the Structural Model

Figure 2 shows the standardised path coefficients estimated by Mplus 7 (Muthén & Muthén, 1998-2016) for Model 6.

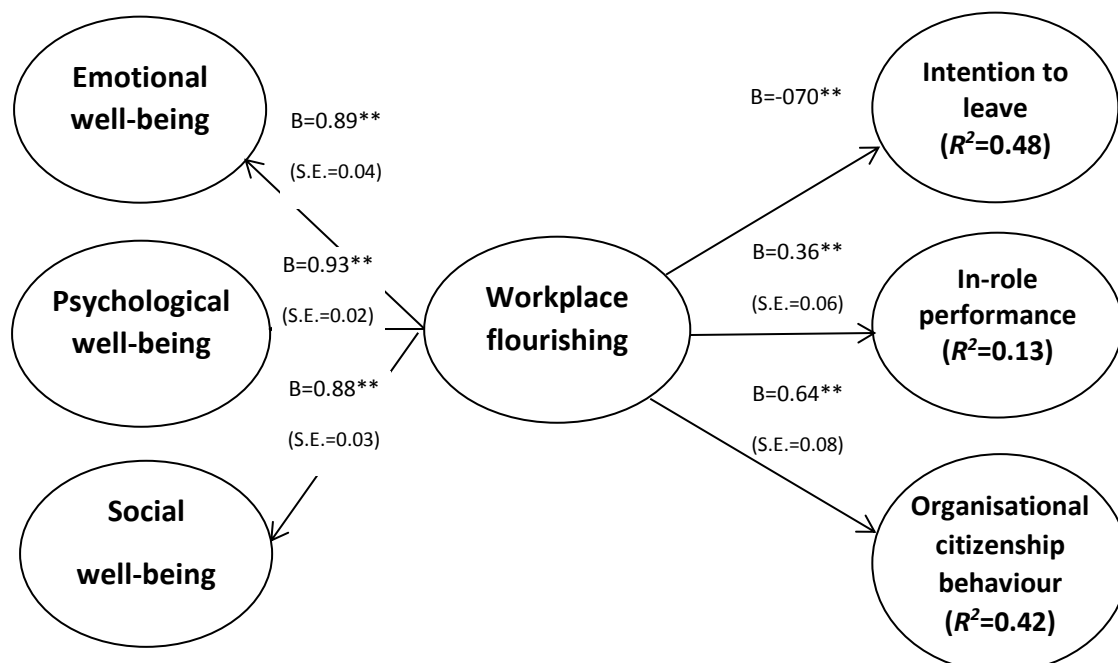


Figure 2. The structural model – standardised solution with standard errors in parentheses (*, $p < 0.05$; **, $p < 0.01$).

Figure 2 shows the standard path coefficients found with workplace flourishing as independent variable and intention to leave, in-role performance, and organisational citizenship behaviour as dependent variables.

For the portion of the model that predicts intention to leave, Figure 2 shows that the path coefficient of workplace flourishing ($\beta = -0.70$; $p = < 0.01$) was statistically significant and had the expected sign. Workplace flourishing explained 48% (large effect) of the variance in intention to leave. Based on these results, support was found for Hypothesis 3.

For the portion of the model that predicts in-role performance, the path coefficient of workplace flourishing ($\beta = 0.36$; $p = < 0.01$) was statistically significant and had the expected sign. Workplace flourishing explained 13% (medium effect) of the variance in in-role performance. Based on these results, support was found for Hypothesis 4.

For the portion of the model that predicts organisational citizenship behaviour, the path coefficient of workplace flourishing (WF) ($\beta = 0.64$; $p = < 0.01$) was statistically significant and had the expected sign. Workplace flourishing explained 42% (large effect) of the variance in organisational citizenship behaviour. Based on these results, support was found for Hypothesis 5.

MANOVA followed to investigate the relationship between perceived levels of workplace flourishing and positive practices. Results are reported in Table 7.

Table 7

MANOVA – Differences between the Levels of Workplace Flourishing and Positive Practices

Variable	Value	<i>F</i>	<i>df</i>	Error <i>df</i>	<i>p</i>	η^2
Workplace flourishing	0.71	7.92	12	500	0.00*	0.16

* Statistically significant difference: $p < 0.01$

Analysing the Wilks' lambda statistic, Table 7 indicates a statistically significant difference ($p < 0.01$) between positive practices and the different levels of workplace flourishing. Positive practices explained 16% (medium effect) of the variance in workplace flourishing.

Between-subjects effects (not reported in Table 7) showed that the groups differed in terms of respect ($F = 30.41, p < 0.01, \eta^2 = 0.19$), support ($F = 31.91, p < 0.01, \eta^2 = 0.20$), caring ($F = 28.29, p < 0.01, \eta^2 = 0.18$), meaning ($F = 46.13, p < 0.01, \eta^2 = 0.27$), inspiration ($F = 31.79, p < 0.01, \eta^2 = 0.20$), and forgiveness ($F = 23.59, p < 0.01, \eta^2 = 0.16$). Meaning explained the most variance in workplace flourishing (27%, large effect), followed by support (20%, medium effect), inspiration (20%, medium effect), respect (19%, medium effect), caring (18%, medium effect), and forgiveness (16%, medium effect). Individuals who scored high on flourishing (compared to those who scored low) experienced their work environment to be significantly more respectful, supportive, caring, meaningful, inspirational, and forgiving.

Tukey's HSD tests (not reported in Table 7) showed significant mean differences between languishing and moderately mentally healthy individuals, as well as between languishing and flourishing individuals based on the respect, support, care, meaning, inspiration, and forgiveness they experience at their school. Significant mean differences between moderately mentally healthy and flourishing individuals were only found on one of the positive practices, namely meaning.

Based on these results support was found for Hypothesis 6.

Discussion

The first aim of the study was to assess the reliability and validity of the Flourishing-at-Work Scale – Short Form (FAWS-SF) in relation to intention to leave, in-role performance, and organisational citizenship behaviour. The second aim was to assess the prevalence of workplace flourishing and to investigate differences in the perceived flourishing levels of teachers based on the positive practices they experience in the school environment.

The results indicated that the Flourishing-at-Work Scale – Short Form (FAWS-SF) is a valid and reliable instrument. Workplace flourishing is a multidimensional construct consisting of emotional, psychological, and social well-being. This is consistent with the three-factor structure established by previous studies (Rautenbach & Rothmann, in press-b) and aligns with Keyes's (2002) model of flourishing in general and Rothmann's (2013) model of flourishing at work. Similar to the study of Rautenbach and Rothmann (in press-b), the FAWS-SF demonstrated good to excellent reliability (full scale = 0.92; EWB = 0.81; PWB =

0.85; SWB = 0.86), emphasising its usefulness in measuring flourishing versus languishing at work. The successful diagnosis and classification of employee well-being as measured by the FAWS-SF could be vital for organisational prosperity.

In terms of the relationship between workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour, the current study found statistically significant relationships. Workplace flourishing explained 48% (large effect) of the variance in intention to leave, 42% (large effect) in OCB, and 13% (medium effect) in in-role performance. Therefore, when employees flourish in the workplace, they will be less likely to contemplate leaving their current jobs and perform better, both within (although to a lesser extent) and beyond the confines of their job descriptions. These findings are consistent with previous research findings (Diedericks & Rothmann, 2014; Redelinguys et al., in press; Rothmann, 2013), and confirm the validity of the FAWS-SF.

Similar results were found when comparing the variance explained by workplace flourishing as measured by the FAWS (see Redelinguys et al., in press) and the FAWS-SF (in the current study) with regard to intention to leave, in-role performance, and OCB. In the respective studies, both measures explained more than 47% (large effect) in the variance of intention to leave (48% versus 62%), more than 12% (medium effect) in the variance of in-role performance (13% versus 21%), and more than 39% (large effect) in the variance of OCB (42% versus 40%). These results suggest that the FAWS-SF can measure workplace flourishing just as effectively as the FAWS, with the benefit of placing less of a burden on participants.

In terms of the prevalence of workplace flourishing, almost half of the sample was moderately mentally healthy (49.22%), 44.19% flourished, while less than 10% languished (6.59%). Although the percentage of flourishing individuals exceeded that of the majority of South African studies (e.g. Boshoff et al., 2014; Rothmann, 2015), the trend that less than half of the population flourishes still persists. Further research into the factors that affect flourishing could provide useful information in counteracting the sub-par flourishing levels experienced by teachers.

Individuals who scored high on flourishing (compared to those who scored low) experienced their work environment to be significantly more respectful, supportive, caring, meaningful,

inspirational, and forgiving. Positive practices had a statistically significant effect on workplace flourishing, explaining 16% (medium effect) of its variance. In terms of specific positive practices, meaning explained the most variance in workplace flourishing (27%, large effect). When teachers find themselves in environments where meaningfulness is emphasised, where they are elevated and renewed by the work that they do, they are destined to flourish. Significant medium effects were found for the remainder of the positive practices, namely support (20%), inspiration (20%), respect (19%), caring (18%), and forgiveness (16%). Therefore, in addition to meaning, the flourishing levels of teachers (although to a lesser extent) are dependent on schools to create environments where people take interest in and care for one another; where kindness is reflected in acts of support and compassion; where mistakes are forgiven; where people set positive examples and inspire one another; and where respect and appreciation towards one another is freely exhibited. This highlights the importance of schools to be mindful of the organisational practices they embody, as these practices significantly affect the well-being of their employees. Similar to previous studies (Fouché et al., in press; Rautenbach & Rothmann, in press-c), the three positive practices that had the biggest impact on workplace flourishing were meaning, inspiration, and support.

Numerous study limitations surfaced. Firstly, the use of a cross-sectional design hindered the determination of causal relationships amongst the study variables. Secondly, the use of self-reported measures may lead to “common method variance”. Thirdly, due to the restrictions to the teaching profession, the generalisation of findings to other contexts should be done cautiously. Lastly, the relatively small sample size hindered the examination of workplace flourishing and positive practices from a multilevel perspective.

Recommendations

Despite the various noted limitations, various recommendations can be made for the management of the respective schools. Similar to the corporate environment, schools are also workplaces, with human resources (teachers) being the key ingredient in school operations (Weller-Ferris, 1999). Therefore, schools should invest a considerable amount of time, energy, and money (if possible) in attending to the holistic wellness of their employees to ensure their retention and performance. As human resources form the core business of schools, schools could explore the possibility of implementing basic employee assistance programmes (EAPs). EAPs may help to identify employees at risk, so that interventions can

be directed at them on an individual level. From an organisational level, schools should strive to create a culture where management, employees, and learners exhibit mutual respect, support, care, and forgiveness towards one another – a culture where employees are elevated and renewed by the work that they do, enabling them to lead by example and inspire others. When such a culture is institutionalised, it should lay the foundation for optimal health and performance in the workplace.

A recommendation for future research includes the expansion of the study to other contexts, both from a cross-sectional and a longitudinal viewpoint. Future studies should also assess additional antecedents and outcomes related to workplace flourishing. Lastly, multilevel studies should be conducted to assess the effects of positive organisational practices on flourishing of teachers.

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CHAPTER 4

RESEARCH ARTICLE 3

Needs-supplies Fit, Flourishing at Work, and Intention to Leave: A Longitudinal Study

Abstract

The aim of this study was to investigate relationships between needs-supplies fit, workplace flourishing, and intention to leave. A longitudinal survey design was used with a sample of 201 academic personnel from secondary schools in Gauteng. The Needs-Supplies Subscale, The Flourishing-at-Work Scale – Short Form, and Turnover Intentions Scale were administered. The results showed that the measuring instruments used in the study were reliable and invariant over two time periods. Results from the cross-lagged structural model showed a statistically significant and positive causal relationship between needs-supplies fit and workplace flourishing. No significant causal relationships were found between needs-supplies fit and intention to leave, or between workplace flourishing and intention to leave.

Keywords: Needs-supplies fit, workplace flourishing, intention to leave, longitudinal, cross-lagged

Teachers are subjected to a substantial amount of work pressure (Abenavoli, Jennings, Greenberg, Harris, & Katz, 2013; Kyriacou, 2001), often experiencing higher job dissatisfaction and poorer mental health compared to other occupations (Johnson et al., 2005; Travers & Cooper, 1993). They find themselves burnt-out (Jackson, Rothmann, & Van de Vijver, 2006), overworked (Jackson & Rothmann, 2006), demoralised (Mentz, 2007), and regularly absent (Steyn, Wolhuter, & De Waal, 2004). Despite all the obstacles faced by teachers, several studies have shown that teachers are capable of feeling and functioning well at work. Many teachers experience satisfaction and happiness in the workplace (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). Furthermore, they are also engaged at work, as they derive a sense of enthusiasm and meaningfulness from their work (Buckley, Schneider, & Shang, 2005; Roth, Assor, Kanat-Maymon, & Kaplan, 2007). Seeing that elevated teacher well-being is an achievable objective, it is vital to understand the factors associated with teacher well-being and how these factors interact with one another as time passes.

To date, no study has focused on the longitudinal analysis of workplace flourishing. This is problematic as workplace flourishing is not a fixed state (Rautenbach & Rothmann, in press). Although some longitudinal studies exist regarding dimensions of person-environment fit and dimensions of workplace flourishing (De Beer, Rothmann, & Mostert, 2016; Gabriel, Diefendorff, Chandler, Moran, & Greguras, 2014; Lu, Wang, Lu, Du, & Bakker, 2014), none of these studies have taken into consideration the multidimensionality of work-related well-being. Not considering the multidimensionality of work-related well-being could be harmful to the long-term health of employees (Porath, Spreitzer, Gibson, & Garnett, 2012). Therefore, it is necessary to honour the multidimensionality of workplace flourishing, as previous studies only partly explained how these constructs relate to each other over time. Furthermore, the relationship between elements of PE fit and elements of workplace flourishing has yielded inconclusive and complex findings. While some studies (Gabriel et al., 2014) have found that fit primarily precedes job satisfaction and positive affect (elements of EWB), others (De Beer et al., 2016; Lu et al., 2014) have found that work engagement (an element of PWB) precedes fit. Therefore, the relationship between fit and flourishing needs further clarification.

Another research gap is that no previous studies have investigated the relationships between needs-supplies fit, workplace flourishing, and intention to leave. Gaining insight into the

most influential causes of employees' intent to leave can assist organisations to adopt more effective retention strategies to retain talented employees. This information could be especially helpful for the educational sector in South Africa, where commonly cited problems include high attrition rates (Steyn, 2006), teacher shortages (Xaba, 2011), and low teacher performance (Jackson & Rothmann, 2006).

Needs-supplies Fit

Person-environment fit is not a static construct (Yu, 2009), as the good fit of today and the good fit of tomorrow are dependent on the variables which assess congruence (Muchinsky & Monahan, 1987). Some individual and environmental characteristics are more static, while others are more changeable (Sekiguchi, 2004). Most research on person-environment fit perceptions has ignored the possibility of substantive within-person changes (Gabriel et al., 2014). This is problematic as the measurement of fit at one point in time inaccurately explains how employees and environments interact over an extended period of time (Feldman & Vogel, 2009; Jansen & Shipp, 2013). Yu (2013) suggests that fit should be viewed as a process, where changes in work environments create changes in employees, and vice versa.

Person-environment fit is one of the most central concepts in the field of work-related behaviour (Schneider, 2001). Person-environment fit refers to the perceived congruence between employees and aspects of the work environment, typically consisting of person-organisation fit and person-job fit. Although studies have critiqued the use of perceived fit above actual fit, there is overwhelming evidence that suggests that PE fit perceptions are stronger predictors of employee attitudes and behaviours (Cable & Judge, 1997; Kristof, 1996; Kristof-Brown, Zimmerman, & Johnson, 2005). Cable and DeRue (2002) have argued that a two-factor conceptualisation of person-environment fit is insufficient, as it ignores needs-supplies fit, which is one of the basic motivations for employees to enter the workplace. Needs-supplies fit refers to the perceived congruence between job rewards and employee needs (Cable & DeRue, 2002). Needs refer to employees' job-related psychological desires, preferences, goals, and values; while supplies refer to factors such as remuneration, training and development, and favourable working conditions (Cable & DeRue, 2002; Muchinsky & Monahan, 1987). When employees feel that their needs are fulfilled by the environment, they enjoy better work-related well-being and lower turnover intention (Redelinghuys, Rothmann, & Botha, in press-a).

Flourishing at Work

Flourishing has been subjected to numerous conceptualisations. According to Seligman's (2011) PERMA model, five states are associated with flourishing, namely positive emotion (P), engagement (E), positive relationships (R), meaning (M), and accomplishment (A). Similarly, Huppert and So (2013) acknowledged positive emotion, engagement, meaning, and positive relations in their model of flourishing. However, they built a larger model to include aspects such as satisfaction with life, competence, resilience, vitality, optimism, self-esteem, and emotional stability. But these models focused on flourishing in general, which refers to flourishing in everyday life outside of work. In an attempt to measure flourishing in the work context, Bono, Davies, and Rasch (2012) included aspects such as job satisfaction, positive emotion, engagement, self-determination, and learning. Although each model has been valuable in its own right, each predominantly focuses on the emotional and psychological aspects of flourishing, while ignoring the social aspects.

In order to address the preceding gap, Keyes (2002) deviated from popular belief that the absence of mental illness equates to an individual being mentally healthy. He developed a comprehensive three-factor model of flourishing, building on studies conducted by Diener, Suh, Lucas, and Smith (1999) who primarily focused on emotional well-being; Ryff (1989) who distinguished between emotional and psychological well-being; as well as studies conducted by himself focusing on social well-being (Keyes, 1998). As a result, Keyes (2002) combined emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB) as criteria for people to flourish in general life. Flourishing, however, also occurs in work and organisational contexts (Rothmann, 2013).

Workplace flourishing refers to various judgements employees make regarding their emotional, psychological, and social well-being in the workplace (Rautenbach & Rothmann, in press; Rothmann, 2013). When employees flourish, they display a wide range of positive work-related attitudes (Rautenbach & Rothmann, in press). They derive a sense of satisfaction from their jobs and experience frequent positive affect. They experience a sense of freedom and choice when carrying out tasks, effectively deal with their environment, and feel connected to others. Finding their work meaningful and purposeful, they find themselves learning often. They are emotionally, cognitively, and physically engaged in their work. Furthermore, when employees flourish, they believe that they are valuable organisational

members, illustrating positive attitudes towards the potential and diversity of others. They experience a sense of comfort and support, finding the organisation and social relationships at work both meaningful and comprehensible. When employees feel and function well at work, they are more likely to remain with their organisation (Redelinguys et al., in press-a).

Fit, Flourishing, and Intent to Leave

Studying intention to leave is more sensible than studying actual turnover (Harris, Kacmar, & Witt, 2005), as an employee's intention to leave his or her organisation is the strongest predictor of voluntary turnover (Ahmad & Rainyee, 2014; Griffeth, Hom, & Gaertner, 2000; Park & Kim, 2009). Intention to leave is defined as the strength of an employee's viewpoint that he or she no longer wants to work for his or her organisation (Kahumuza & Schlechter, 2008). It refers to the final cognitive decision-making process whereby employees actively search for alternative employment opportunities (Park & Kim, 2009). When employees have other opportunities at their disposal, actual turnover will loom (Wheeler, Gallagher, Brouer, & Sablynski, 2007).

Various theories can be used to explain the relationship between needs-supplies fit, workplace flourishing, and intention to leave. Locke's (1976) range of affect theory postulates that job satisfaction is determined by the congruence between employee needs and what the job has to offer (supplies), suggesting that need fulfilment leads to job satisfaction. The notion that perceptions regarding fit precede affective reactions is supported by cognitive appraisal theories of emotion (Roseman, Spindel, & Jose, 1990; Scherer, 1999). These theories suggest that affective responses (e.g. work engagement and positive affect) are induced as a result of cognitive evaluations (e.g. perception about fit).

The theory of work adjustment (TWA; Dawis & Lofquist, 1984) posits that employees seek to obtain and sustain congruence with their work environment. When employees experience congruence between their needs and the supplies offered by their job, they will derive a greater sense of satisfaction from their job (Cable & DeRue, 2002; Rice, McFarlin, Hunt, & Near, 1985). However, when needs are not satisfied, employees or organisations (or both) will engage in active or reactive adjustment behaviours aimed at need satisfaction (Dawis & Lofquist, 1984). Active adjustment behaviours may include an employee's attempt to change his or working environment, or an organisation's attempt to change employee expectations.

On the other hand, reactive adjustment behaviours may include an employee's attempt to change his or her priorities to better suit the work environment, or an organisation's attempt to change its reward and recognition systems to better suit the employee. When adjustment successfully transpires, parties will strive to maintain their new-found congruence as a result of the associated satisfaction. However, in the case of failed adjustment behaviours, employees are more likely to leave their organisation (Dawis & Lofquist, 1984).

Similarly, job embeddedness theory (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001) posits that employees' retention decisions are influenced by links, fit, and sacrifice. Links refer to formal or informal relations between employees and organisations (Mitchell et al., 2001). Employees are more likely to be attached to their job or organisation when they experience a high number of links in the workplace. Fit refers to an employee's perceived compatibility with his or her work environment (Mitchell et al., 2001). When employees experience fit, they are more likely to feel professionally and personally tied to their organisation. Sacrifice refers to the perceived material or psychological costs associated with turnover (e.g. giving up learning opportunities or relationships at work) (Mitchell et al., 2001). Employees who have a lot to sacrifice compared to those who don't, find it significantly more difficult to cut ties with their organisations (Shaw, Delery, Jenkins, & Gupta, 1998). Therefore, when employees established links in the workplace, for instance through the experience of social integration and relatedness, and when employees experience fit between their needs and the supplies offered by the job (needs-supplies fit), they will have a harder time leaving their organisation, as they have much more to sacrifice.

In addition to theory, numerous longitudinal studies have also found that elements of person-job (PJ) fit may predict elements of workplace flourishing, such as affect (Gabriel et al., 2014), job engagement (Chen, Yen, & Tsai, 2014), and job satisfaction (Gabriel et al., 2014; Saks & Ashforth, 1997). Furthermore, longitudinal studies have shown that elements of PJ fit (Saks & Ashforth, 1997) and elements of workplace flourishing, such as affect (Côté & Morgan, 2002), job satisfaction (Brewer, Chao, Colder, Kovner, & Chacko, 2015; Côté & Morgan, 2002; Hom & Griffeth, 1991), and co-worker support (Tei-Tominaga & Miki, 2010) may predict intention to leave.

From the preceding discussion, it can be deduced that fit has an impact on employee well-being, while both fit and flourishing have an impact on intention to leave. Therefore, the following hypotheses are posited:

Hypothesis 1: Needs-supplies fit (T1) positively predicts workplace flourishing (T2).

Hypothesis 2: Needs-supplies fit (T1) negatively predicts intention to leave (T2).

Hypothesis 3: Workplace flourishing (T1) negatively predicts intention to leave (T2).

Aim

The aim of this study was to investigate relationships between needs-supplies fit, workplace flourishing, and intention to leave using a two-wave cross-lagged panel design.

Method

Research Design

A longitudinal research approach was utilised to test the cross-lagged effects between the constructs. This requires the assessment of the same participants on the same constructs over time. The cross-lagged analysis enabled the researcher to investigate temporal precedence of the cause; a prerequisite for causal inference (Newsom, 2015).

Participants

A longitudinal survey research design was conducted amongst secondary school teachers, heads of departments, vice-principals, and principals working in the Sedibeng East and West District in Gauteng. 800 questionnaires were distributed, of which 258 (T1) were completed satisfactorily (response rate = 32%); this number further declined to 201 (T2) participants over the six-month time interval. Participants differed in terms of gender, age, race, marital status, job title, and work experience.

Measuring Instruments

The following measuring instruments were used in the empirical study:

Workplace flourishing was measured with the *Flourishing-at-Work Scale – Short Form* (FAWS-SF; Rautenbach & Rothmann, in press). The FAWS-SF consists of the 17 most archetypal items expressive of the construct, scored on a six-point scale ranging from 1 (*never*) to 6 (*every day*). The FAWS-SF encompasses three dimensions: emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB). EWB comprises two dimensions, namely positive affect (measured by two items) (“During the past month at work, how often did you feel happy?”; “During the past month at work, how often did you feel grateful?”), and job satisfaction (“During the past month at work, how often did you experience satisfaction with your job?”). PWB comprises nine dimensions, namely autonomy (“During the past month at work, how often did you feel confident to think or express your own ideas and opinions?”), competence (“During the past month at work, how often did you feel good at managing the responsibilities of your job?”), relatedness (“During the past month at work, how often did you feel really connected with other people at your job?”), meaning (“During the past month at work, how often did you feel that you understand how your work contributes to your life’s meaning?”), purpose (“During the past month at work, how often did you feel that the work you do serves a greater purpose?”), cognitive engagement (“During the past month at work, how often did you focus a great deal of attention on your work?”), emotional engagement (“During the past month at work, how often did you get excited when you perform well on your job?”), physical engagement (“During the past month at work, how often did you feel energised when you work?”), and learning (“During the past month at work, how often did you find yourself learning?”). SWB comprises five dimensions, namely social contribution (“During the past month at work, how often did you feel you are a key member of this school?”), social acceptance (“During the past month at work, how often did you feel that people in your school are basically good?”), social actualisation (“During the past month at work, how often did you feel that your school is becoming a better place for people like you?”), social integration (“During the past month at work, how often did you feel that you really belong to your school?”), and social coherence (“During the past month at work, how often did you feel that the way your school works, makes sense to you?”). Internal consistencies higher than 0.80 have been established (Rautenbach & Rothmann, in press; Redelinghuys et al., in press-b).

Needs-supplies fit was measured with the Needs-Supplies Fit Subscale from the *Perceived Fit Scale* (PFS; Cable & DeRue, 2002). The Needs-Supplies Fit Subscale consists of three items scored on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

A sample item includes: “There is a good fit between what my job offers me and what I am looking for in a job”). Within a South African context, reliabilities ranging between 0.88 (Redelinghuys & Botha, 2016) and 0.92 (Redelinghuys et al., in press-a) have been established for the subscale.

Intention to leave was measured with the *Turnover Intention Scale* (TIS; Sjöberg & Sverke, 2000). The TIS consists of three items scored on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Encompassing a single dimension, a sample item of the scale includes: “I am actively looking for other jobs”. Sjöberg and Sverke (2000) reported a Cronbach alpha coefficient of 0.83 for the scale. Within a South African context, Redelinghuys and Botha (2016) established a reliability coefficient of 0.90.

Research Procedure

Permission to conduct the study was obtained from the Knowledge Management and Research Office at the Gauteng Department of Education (GDE), whereby clearance was given in the form of a research approval letter. The aforementioned letter was valid from 8 February 2016 until 30 September 2016 in order to ensure minimal disruption of school activities during certain periods. Ethical clearance was further obtained from the Ethics Committee at the North-West University’s Vaal Triangle Campus, enabling the researcher to initiate the data collection procedure. Meetings were arranged with secondary schools in the Sedibeng East and West District in order to discuss the logistics regarding the study. This allowed the researcher to make further arrangements with interested parties in terms of distributing and collecting the questionnaires. Participants were allowed two weeks to complete the English questionnaires, consuming approximately 30 minutes of their time. English as language of instruction was deemed appropriate for the target audience due to their level of education and occupation. The same procedure was repeated six months later. The first data collection took place in February 2016 (first school term), while the second data collection occurred in August 2016 (third school term).

Statistical Analysis

The Mplus 7.4 statistical program (Muthén & Muthén, 1998-2016) was employed to conduct statistical analysis. Descriptive statistics (e.g. means, standard deviations, skewness, and kurtosis) and inferential statistics (e.g. correlations) were utilised for data analysis. Raykov's rho coefficients (Raykov, 2009) were used to assess the reliability of measuring instruments. Pearson product-moment correlation coefficients were used to measure the proposed relationships between the study variables. Effect sizes were used to determine the practical significance of the results (Cohen, 1988). A cut-off point of 0.30 (medium effect) and 0.50 (large effect) was set for the practical significance of the correlation coefficients (Cohen, 1988). The confidence interval level for statistical significance was set at a value of 95% ($p \leq 0.05$). SPSS23 (IBM Corp, 2016) was used to compute descriptive statistics.

Latent variable modelling with the maximum likelihood estimation with robust standard errors (MLR) indicator was conducted. A measurement model was specified by creating latent variables for each point in time. A longitudinal measurement invariance analysis was conducted by sequentially testing a series of progressively restrictive models, which assessed configural invariance, metric invariance, and scalar invariance (see Vandenberg & Lance, 2000). Measurement invariance assesses whether the same constructs are examined over time (Horn & McArdle, 1992).

A cross-lagged model using latent variables with multiple indicators was used to study autoregressive and cross-lagged paths (Newsom, 2015). Measurement error can be estimated with multiple indicators, providing more accurate estimates of autoregressive and cross-lagged effects. Initial invariance tests and estimation of latent variables in the model allow one to address the potential ramifications of unequal or changing reliabilities. The latent variable approach makes it possible to estimate autocorrelations among measurement residuals, which remove stable specific variance that inflate estimates of reliability in constructs over time. The loadings on latent variables were constrained equal over time and all pairs of repeated indicators were allowed to correlate over time.

Effects coding identification (Little, Slegers, & Card, 2006) was used to scale the factor variances. Using this approach, the value of one loading for a factor is constrained to be a function of the other loadings for the factor. Requiring one of the loadings to be equal to the

number of loadings minus the remaining loadings produces an estimate of the factor variance that is a function of the loadings on the factor. Effects coding identification is an alternative for constraining the factor value (Kline, 2016). Scaling the factor variance to one particular indicator might be problematic (specifically in longitudinal studies) if that indicator is not representative of the other indicators. In contrast, the factor variance is a weighted function of the covariance of the indicators when effects coding identification is used. The variance of the factor can then be considered an average of the covariances, putting the scaling of the scaling of the variance in terms of the variances and covariances among the indicators.

Cross-lagged models allow the researcher to examine the temporal order in the relationship between variables (Newsom, 2015). The following Mplus indices were used in the study: the chi-square statistic (χ^2), the standardised root mean residual (SRMR), the root mean square error of approximation (RMSEA), the Tucker-Lewis index (TLI), and the comparative fit index (CFI) (Hair, Black, Babin, & Andersen, 2010). CFI and TLI values of 0.90 and higher were regarded as acceptable (Wang & Wang, 2012). RMSEA and SRMR values of 0.08 and lower indicated close fit between the model and the data (West, Taylor, & Wu, 2012).

Results

Measurement Invariance

Longitudinal measurement invariance was tested to examine whether the same factors were examined across time intervals (Horn & McArdle, 1992). Results are indicated in Table 1.

Table 1
Configural, Metric, and Scalar Invariance

Model	Number of parameters	χ^2	<i>df</i>	<i>p</i>	CFI	TLI	RMSEA	SRMR
Configural	150	842.562*	440	0.00	0.92	0.91	0.07	0.05
Metric	140	859.266*	458	0.00	0.92	0.91	0.07	0.06
Scalar	122	887.581*	476	0.00	0.92	0.91	0.07	0.06

As seen from the fit statistics in Table 1, the construct measures displayed strong configural (same factor structure across times), metric (same factor loadings across times), and scalar (same item intercepts across times) invariance across the two time waves. This suggests that each measuring instrument was invariant for each participant over time.

Table 2
Comparison of Configural, Metric, and Scalar Models

Models compared	χ^2	<i>df</i>	<i>p</i>
Metric against configural	16.438	18	0.56
Scalar against configural	42.358	36	0.22
Scalar against metric	27.011	18	0.08

As seen from Table 2, no significant differences were found in the comparison of the configural, metric, and scalar models of the two samples across the two time points. Configural invariance across the two time points indicates that the factor structures were invariant. Metric invariance across the two time points indicates that the factor loadings are equal and that the items of the measures may be interpreted to measure the same constructs across the two time points. Scalar invariance indicated that the item intercepts were invariant across the two time points. These findings provide evidence for strong longitudinal measurement invariance.

Descriptive Statistics and Product-Moment Correlations

The descriptive statistics and Raykov's rho coefficients of the measuring instruments, as well as the product-moment correlation coefficients between the constructs are reported in Table 3.

From the results in Table 3 it can be seen that the Raykov's rho coefficients of all the measuring instruments across both time intervals were acceptable, ranging from 0.79 to 0.92. Raykov's rho coefficients share the same acceptable cut-off point as Cronbach alpha coefficients, acknowledging values of ≥ 0.70 as acceptable (Nunnally & Bernstein, 1994).

Furthermore, Table 3 provides the correlation coefficients of the study variables. Needs-supplies fit (T1) was practically and statistically significantly related to emotional well-being (T2), psychological well-being (T2), and social well-being (T2) with large effects (> 0.50).

Needs-supplies fit (T1), emotional well-being (T1), psychological well-being (T1), and social well-being (T1) were all practically and statistically significantly related to intention to leave (T2) with large effects (> 0.50).

In terms of reliability, Table 3 shows that each scale had good internal consistency: needs-supplies fit (T1 = 0.86, T2 = 0.90), emotional well-being (T1 = 0.83, T2 = 0.79), psychological well-being (T1 = 0.86, T2 = 0.89), social well-being (T1 = 0.88, T2 = 0.91), and intention to leave (T1 = 0.91, T2 = 0.92). The test-retest reliabilities were acceptable: Needs-supplies fit: 0.70; Emotional well-being: 0.65; Psychological well-being: 0.74; Social well-being: 0.74, and Intention to leave: 0.83.

The means in Table 3 show that participants on average experienced slightly less fit, emotional well-being, psychological well-being, and slightly higher intention to leave, while experiencing the same levels of social well-being when comparing time 1 and 2.

Table 3

Descriptive Statistics, Reliabilities and Correlation Coefficients

	<i>M</i>	<i>SD</i>	ρ	1	2	3	4	5	6	7	8	9
1 Needs-supplies fit (T1)	5.02	1.38	0.86	1.00	-	-	-	-	-	-	-	-
2 Emotional well-being (T1)	4.45	1.06	0.83	0.65 ⁺⁺⁺	1.00	-	-	-	-	-	-	-
3 Psychological well-being (T1)	4.62	0.79	0.86	0.71 ⁺⁺⁺	0.82 ⁺⁺⁺	1.00	-	-	-	-	-	-
4 Social well-being (T1)	4.20	1.14	0.88	0.64 ⁺⁺⁺	0.74 ⁺⁺⁺	0.81 ⁺⁺⁺	1.00	-	-	-	-	-
5 Intention to leave (T1)	2.73	1.30	0.91	-0.75 ⁺⁺⁺	-0.62 ⁺⁺⁺	-0.68 ⁺⁺⁺	-0.61 ⁺⁺⁺	1.00	-	-	-	-
6 Needs-supplies fit (T2)	4.92	1.43	0.90	0.70 ⁺⁺⁺	0.45 ⁺⁺⁺	0.50 ⁺⁺⁺	0.45 ⁺⁺⁺	-0.52 ⁺⁺⁺	1.00	-	-	-
7 Emotional well-being (T2)	4.40	0.99	0.79	0.63 ⁺⁺⁺	0.65 ⁺⁺⁺	0.65 ⁺⁺⁺	0.59 ⁺⁺⁺	-0.55 ⁺⁺⁺	0.74 ⁺⁺⁺	1.00	-	-
8 Psychological well-being (T2)	4.48	0.87	0.89	0.63 ⁺⁺⁺	0.59 ⁺⁺⁺	0.74 ⁺⁺⁺	0.58 ⁺⁺⁺	-0.54 ⁺⁺⁺	0.73 ⁺⁺⁺	0.87 ⁺⁺⁺	1.00	-
9 Social well-being (T2)	4.20	1.14	0.91	0.58 ⁺⁺⁺	0.54 ⁺⁺⁺	0.60 ⁺⁺⁺	0.74 ⁺⁺⁺	-0.50 ⁺⁺⁺	0.68 ⁺⁺⁺	0.81 ⁺⁺⁺	0.79 ⁺⁺⁺	1.00
10 Intention to leave (T2)	2.78	1.30	0.92	-0.64 ⁺⁺⁺	-0.51 ⁺⁺⁺	-0.56 ⁺⁺⁺	-0.51 ⁺⁺⁺	0.83 ⁺⁺⁺	-0.71 ⁺⁺⁺	-0.71 ⁺⁺⁺	-0.70 ⁺⁺⁺	-0.65 ⁺⁺⁺

* Statistically significant ($p \leq 0.05$) ** Statistically significant ($p \leq 0.01$)

+ Correlation is practically significant $r \geq 0.30$ (medium effect) ++ Correlation is practically significant $r \geq 0.50$ (large effect)

T1 = Time 1; T2 = Time 2

The Cross-Lagged Structural Model

Structural equation modelling (SEM) was used to test the study hypotheses. The structural model provided adequate fit to the dataset: $\chi^2 = 1561.812$, $p < 0.001$, RMSEA = 0.06, CFI = 0.91, TLI = 0.90, SRMR = 0.07.

Figure 1 illustrates the cross-lagged model with auto-regression control paths.

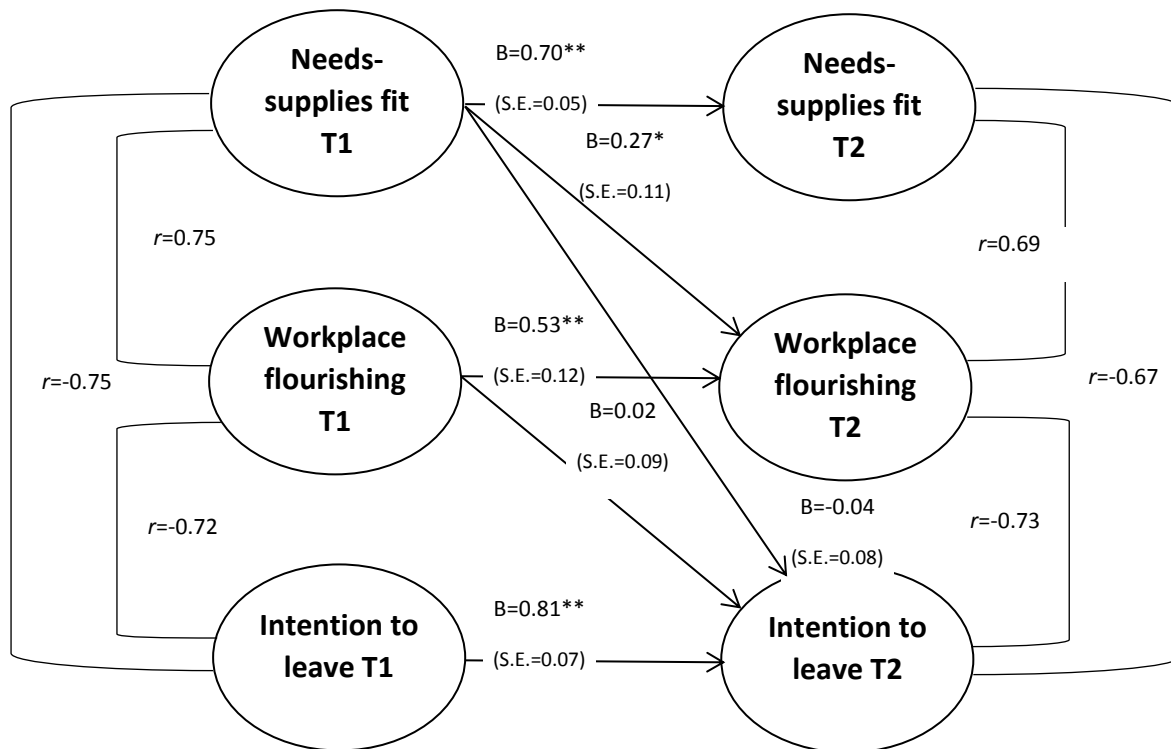


Figure 1. The cross-lagged structural model. (* $p < 0.05$; ** $p < 0.01$).

For the portion of the model that predicts workplace flourishing (T2), Figure 1 shows that the path coefficient of needs-supplies fit (T1) ($\beta = 0.27$; $p < 0.05$) was statistically significant and had the expected sign. Based on these results, support was found for Hypothesis 1.

For the portion of the model that predicts intention to leave (T2), the path coefficients of needs-supplies fit ($\beta = -0.04$; $p > 0.05$) and workplace flourishing ($\beta = 0.02$; $p > 0.05$) had the expected sign, but were not significant. Based on these results, no support was found for Hypotheses 2 and 3.

In terms of effect sizes (Cohen, 1988), the cross-lagged structural model accounted for the following percentages of variance explained (R^2): needs-supplies fit (T2) = 49% (large effect), workplace flourishing (T2) = 58% (large effect), and intention to leave (T2) = 69% (large effect).

Discussion

The aim of this study was to investigate relationships between needs-supplies fit, workplace flourishing, and intention to leave using a two-wave cross-lagged panel design.

In order to ensure validated findings for longitudinal research, measuring instruments should be reliable and invariant. Results supported the configural, metric, and scalar invariance of the measuring instruments over time. Furthermore, results showed that the measuring instruments showed good test-retest reliability. Test-retest reliability refers to the reliability coefficient that is obtained through the administration of the same measure to the research participants on two separate occasions, with a minimum time interval of six months (Cascio & Aguinis, 2011). The findings are especially important in context of the FAWS-SF, illustrating its construct validity and test-retest reliability over time. The FAWS-SF seems to successfully address the need for a valid and reliable instrument to measure a model of flourishing versus languishing at work (Dagenais-Desmarais & Savoie, 2012; Rothmann, 2013), not only from a cross-sectional viewpoint, but also longitudinally. This suggests that there is not only a place for a construct such as workplace flourishing, but that it can also add significant value.

In terms of the relationship between needs-supplies fit and workplace flourishing, results suggest a significant causal relationship. When employees feel that the organisation attends to their needs, it will not only predict their emotional, psychological, and social well-being, but also cause it. When employees feel that organisations' reward and recognition systems cater for their needs (e.g. need for competence, need for learning and development), they will derive a greater sense of enjoyment from their job, experience frequent positive affect, feel engaged, and feel socially included within the organisation, among other things. This is in line with numerous theories. Cognitive appraisal theories of emotion (Roseman et al., 1990; Scherer, 1999) support the notion that perceived fit precedes affective reactions, suggesting that affective responses such as emotional work engagement and positive affect occur as a

result of high levels of perceived fit. When focusing on the needs of employees, Cable and DeRue's (2002) PE fit model and Locke's (1976) range of affect theory suggest that need fulfilment, which is experienced by the congruence between employee needs and what the job has to offer (supplies), leads to job satisfaction. The theory of work adjustment (TWA; Dawis & Lofquist, 1984) also emphasises the importance of person-environment congruence for experiencing job satisfaction (element of EWB).

Although no comparisons could be made to previous studies with regard to needs-supplies fit and workplace flourishing from a longitudinal perspective, the current study was somewhat consistent with that of Gabriel et al. (2014) in terms of temporal precedence. In their study, they examined the relationships between work affect and job satisfaction (elements of EWB) and perceptions of PE fit (PO fit and PJ fit) among administrative personnel at a tertiary institution. They discovered that PE fit predominantly predicted affect (job satisfaction and positive affect) at both levels of analysis, although some relationships exhibited reciprocal causality (PO fit and job satisfaction), and others supported affect as an antecedent of PE fit perceptions (positive affect and negative affect on person-job fit).

However, the results of the current study differed from those of previous studies. For example, in a study within a technological firm in China, Lu et al. (2014) found that work engagement (element of PWB) caused person-job fit via job crafting. They, however, failed to test bidirectional relationships between work engagement and person-job fit, which posed the question of which variable has the largest impact on the other over time. Aiming to address this issue, De Beer et al. (2016) examined bidirectional relationships between work engagement and person-job fit across various industries in South Africa. Consistent with Lu et al. (2014), their results indicated that work engagement is a stronger predictor of person-job fit over time, while person-job fit as predictor of work engagement received practically no support. Therefore, based on the results of the current study, as well as previous studies, the relationship between elements of PE fit and workplace flourishing remain inconclusive and complex.

In terms of the impact of needs-supplies fit and workplace flourishing on intention to leave, the study did not yield significant results. Even though needs-supplies fit and workplace flourishing are important predictors of intention to leave from a cross-sectional viewpoint (Redelinghuys et al., in press-a), needs-supplies fit and workplace flourishing did not cause

intention to leave in the current sample. In contrast to the current study, numerous theories suggest that the combination of fit and flourishing has an impact on intention to leave and actual turnover. The TWA (Dawis & Lofquist, 1984) and job embeddedness theory (Mitchell et al., 2001) suggest that when congruence is achieved between employees and their work environment, and when employees establish meaningful relationships in the workplace, they will experience increased satisfaction, which will subsequently affect their turnover decisions. Similarly, the attraction-selection-attrition (ASA) model (Schneider, 1987) suggests that employees are attracted to, and remain within, organisations with which they share similar preferences, as this allows them to achieve their goals.

The inability to establish a causal relationship with intention to leave in the current study suggests that other factors in addition to needs-supplies fit and workplace flourishing could help to explain how these factors relate to one another. The TWA (Dawis & Lofquist, 1984) suggests that in the case of need dissatisfaction, employees will engage in active or reactive adjustment behaviours in an attempt to satisfy their needs. Therefore, job crafting could be applicable to the current context, as employees are capable of initiating action and building resources to construct their desired workplace (Bakker, 2010). Job crafting refers to the initiative taken by employees to change various aspects of their jobs, for example changing the manner in which they perform tasks (Tims, Derks, & Bakker, 2016). When employees perceive low fit and work-related well-being, self-initiated actions could assist employees to create their desired workplace which could alter their perceptions of fit and well-being, and subsequently turnover decisions.

Another factor that could be considered is perceived employment opportunities. Predominantly, turnover researchers have emphasised two important variables (job satisfaction and perceived job alternatives) in an attempt to understand voluntary employee turnover (Hulin, Roznowski, & Hachiya, 1985). Mobley's (1977) model of employee turnover suggests that job dissatisfaction leads to three linear cognitive evaluations: 1) initial thoughts of leaving; 2) comparing the current job with other job alternatives; and 3) intention to leave the organisation. Their model, as well as other models (e.g. Lee & Mitchell, 1994; Wheeler, Buckley, Halbesleben, Brouer, & Ferris, 2005; Wheeler et al., 2007), emphasises the importance of viable job alternatives and perceived job mobility in making turnover decisions.

Despite the strength of the longitudinal design, the study had various limitations. Firstly, the study only made use of two waves of data. Secondly, the study only assessed a single dimension of PE fit. Thirdly, the study did not consider other factors that could have played a role in the model, namely job crafting and perceived job alternatives.

Recommendations

Despite the noted limitations, various recommendations can be made. As needs-supplies fit affect employee well-being, it is vital for the school's management and employees to clarify their expectations of one another. Management and employees should actively strive to satisfy each other's realistic expectations, as employees (in terms of well-being) and schools (in terms of the outcomes of employee well-being) are affected equally by this interaction. Open, honest, and frequent discussions can ensure that both parties are aware of the needs and expectations of the other party. Once awareness is raised, both parties can more purposefully and constructively work towards finding solutions to address the experienced inadequacies.

In terms of recommendations for future research, future studies should aim to include more than two waves of data with different time intervals. Furthermore, future studies should strive to honour the multidimensionality of PE fit in relation to workplace flourishing, including other aspects of fit, such as person-organisation (PO) fit and person-group (PG) fit. Finally, future studies should strive to include other relevant variables such as job crafting and perceived employment opportunities.

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CHAPTER 5

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter consists of conclusions pertaining to this study, according to the specific objectives. The limitations of this research are discussed, followed by recommendations for the organisation. Furthermore, recommendations and suggestions are made for future research.

5.1 Conclusions

The conclusions drawn from the study are documented in relation to the three research articles.

Workplace flourishing: Antecedents and outcomes

The aim of this study was to investigate relationships between person-environment fit, workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour.

Quality education plays a pivotal role in developing the South African economy (Jackson, Rothmann, & Van de Vijver, 2006). This requires a motivated, healthy, committed, competent, and well-functioning teacher corps (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Louw, George, & Esterhuysen, 2011). Unfortunately, relatively little is known about the work and career features essential for flourishing (Kidd, 2008). This warrants further investigation into the underlying mechanisms that influence workplace flourishing, to more accurately explain the factors that may impede or facilitate emotional, psychological, and social well-being in the workplace. Further investigation is also needed regarding the outcomes associated with workplace flourishing, to emphasise the benefits of flourishing or the consequences of languishing in the workplace.

The knowledge of a construct is only as good as the measure used in its examination (Dietz & Den Hartog, 2006). Results confirmed the three-factor structure of workplace flourishing as previously established by Rautenbach and Rothmann (in press-a), confirming its construct

validity beyond the fast-moving consumer goods (FMCG) industry. Furthermore, similar to Rautenbach and Rothmann (in press-a), all the dimensions of the FAWS yielded acceptable reliability coefficients, ranging from 0.75 to 0.92. This shows promising results for the use of the FAWS in future research.

Findings from the study showed that person-environment (PE) fit positively predicted workplace flourishing. When employees perceive high congruence between their personal values and organisational values, between the rewards they receive in return for the services they provide, and congruence between the demands of their job and their abilities, they ought to experience increased emotional, psychological, and social well-being in the work context. Although the association between PE fit and workplace flourishing has not been studied before, the results are consistent with the theory of work adjustment (Dawis & Lofquist, 1984), the attraction-selection-attrition theory (Schneider, 1987), and other PE fit theories (e.g. Cable & DeRue, 2002) that indicate that when congruence is achieved between the employee and the work environment, positive outcomes ensue. The results also support the notion of cognitive appraisal theories of emotion (Roseman, Spindel, & Jose, 1990; Scherer, 1999) that cognitive circumstantial evaluations yield affective responses and social identity theory (Tajfel & Turner, 1986) that proposes that employees who experience fit with their organisation's values become part of a 'psychological group'.

Workplace flourishing negatively predicted intention to leave. Numerous theories suggest that elements of workplace flourishing relate to intention to leave. Lee and Mitchell's (1994) unfolding model of voluntary turnover (UMVT), as well as Mobley's (1977) turnover model, suggests that when employees are not satisfied with their jobs, they will start to explore other possibilities through a range of evaluation processes. Additionally, job embeddedness theory (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001) suggests that links affect employee retention decisions. When employees have close links with their colleagues (which could be indicative of social well-being and relatedness), the sacrifice in leaving the organisation would be much more significant. Therefore, when employees flourish in the workplace, they will be less likely to contemplate leaving their current jobs. This is consistent with previous research findings (Diedericks & Rothmann, 2014; Rothmann, 2013).

In terms of the relationship between workplace flourishing, in-role performance, and OCB, the current study found a positive correlation. The flourishing-performance relationship can

be explained by numerous theories. The happy/productive worker thesis suggests that happy (predominantly measured by job satisfaction) employees are productive employees. Quantitative and qualitative reviews of the job satisfaction-job performance relationship has also shown that job satisfaction effectively predicts job performance (Judge, Thoresen, Bono, & Patton, 2001). Other studies have also shown that PWB predicts job performance (Cropanzano & Wright, 2001), while EWB, PWB, and SWB negatively predict counterproductive work behaviour (Diedericks & Rothmann, 2014). Furthermore, social exchange theory (Blau, 1964) suggests that employees who perceive that their organisation contributes significantly to their work-related well-being, should increase their helping behaviours towards the organisation. In this regard, the same principle applies to colleagues. Therefore, when employees function emotionally, psychologically, and socially well at work, it should have a positive effect on both their in-role (according to job requirements) and extra-role (in addition to job requirements) performance. This is consistent with previous research findings (Diedericks & Rothmann, 2014; Rothmann, 2013).

In terms of the indirect effect of PE fit on intention to leave via workplace flourishing, results did not confirm the indirect effect. Results showed that the relationship between PE fit and intention to leave is a direct one, suggesting that PE fit decreases participant intent to leave, regardless of the flourishing levels of participants. This could be interpreted by the ASA model (Schneider, 1987), which suggests that when employees do not experience congruence with their work environment, they will be more likely to leave. Similarly, workplace flourishing had a significant impact on intention to leave, regardless of the PE fit levels of employees. Thus, PE fit and workplace flourishing, both in their own right and independent of each other, significantly predicted teachers' thoughts of leaving their organisation. Job embeddedness theory suggests that employees' retention decisions are influenced by links, fit, and sacrifice (Mitchell et al., 2001). In the current context, as teachers experience fit with their school and aspects of their jobs, and experience links within the organisation (e.g. social integration), they have much more to sacrifice when leaving the school, resulting in lower intention to leave.

PE fit indirectly affected in-role performance and OCB via workplace flourishing. Consequently, PE fit must first increase levels of flourishing in order to subsequently increase in-role performance and OCB. Although the preceding associations have not been studied

before, it seems consistent with Fishbein and Ajzen's (1975) framework that contends that beliefs precede attitudes, intentions, and ultimately behaviours.

In conclusion, when teachers fit, feel well, and function well both psychologically and socially, positive outcomes ensue (i.e. lower intention to leave, higher in-role performance and OCB). Therefore, in order to address the retention and performance of teachers, schools need to attend to the holistic fit and well-being of employees.

Validation of the Flourishing-at-Work Scale – Short Form

The first aim of this study was to assess the reliability and validity of the Flourishing-at-Work Scale – Short Form (FAWS-SF) in relation to intention to leave, in-role performance, and organisational citizenship behaviour. The second aim was to assess the prevalence of workplace flourishing and to investigate differences in the perceived flourishing levels of teachers based on the positive practices they experience in the school environment.

Good quality measures are a prerequisite for the scientific study of flourishing in the workplace (Huppert & So, 2013; Rothmann, 2013). As workplace flourishing is new to the area of measurement, it is important to further examine the psychometric properties of the Flourishing-at-Work Scale – Short Form (FAWS-SF), to ensure that valid and reliable inferences can be made across various industries and population groups. Being the first validated instrument to measure a model of flourishing versus languishing at work (Rautenbach & Rothmann, in press-b), the FAWS-SF could supply organisations with invaluable information regarding the well-being of their employees. Furthermore, it is vital to investigate the factors associated with workplace flourishing and outcomes such as intention to leave and performance, to illustrate the importance of managing work-related well-being. Organisational factors have also been shown to affect employee well-being (Gittel, Cameron, Lim, & Rivas, 2006). Detailed information regarding the organisational factors that affect employee well-being can assist organisations in creating a more positive work environment, an environment where employees can flourish.

Findings from the study showed acceptable psychometric properties for the short scale, which measures flourishing at work. Workplace flourishing is a multidimensional construct consisting of emotional, psychological, and social well-being. This is consistent with the

three-factor structure established by previous studies (Rautenbach & Rothmann, in press-b) and aligns with Keyes's (2002) model of flourishing in general and Rothmann's (2013) model of flourishing at work. Similar to the study of Rautenbach and Rothmann (in press-b), the FAWS-SF demonstrated good to excellent reliability (full scale = 0.92; EWB = 0.81; PWB = 0.85; SWB = 0.86), emphasising its usefulness in measuring flourishing versus languishing at work. The successful diagnosis and classification of employee well-being as measured by the FAWS-SF could be vital for organisational prosperity.

Statistically significant relationships were found between workplace flourishing, intention to leave, in-role performance, and organisational citizenship behaviour. Workplace flourishing explained 48% (large effect) of the variance in intention to leave, 42% (large effect) in OCB, and 13% (medium effect) in in-role performance. Therefore, when employees flourish in the workplace, they will be less likely to contemplate leaving their current jobs and perform better, both within (although to a lesser extent) and beyond the confines of their job descriptions. This is consistent with previous research findings (Diedericks & Rothmann, 2014; Redelinghuys, Rothmann, & Botha, in press; Rothmann, 2013), illustrating the importance of addressing employee well-being.

Similar results were found when comparing the variance explained by workplace flourishing as measured by the FAWS (see Redelinghuys et al., in press) and the FAWS-SF (in the current study) with regard to intention to leave, in-role performance, and OCB. In the respective studies, both measures explained more than 47% (large effect) in the variance of intention to leave (48% versus 62%), more than 12% (medium effect) in the variance of in-role performance (13% versus 21%), and more than 39% (large effect) in the variance of OCB (42% versus 40%). These results suggest that the FAWS-SF can measure workplace flourishing just as effectively as the FAWS, with the benefit of placing less of a burden on participants.

Almost half of the sample were moderately mentally healthy (49.22%), 44.19% flourished, while 6.59% languished. Although the percentage of flourishing individuals exceeded that of the majority of South African studies (e.g. Boshoff, Potgieter, Van Rensburg, & Ellis, 2014; Rothmann, 2015), the trend that less than half of the population flourish still persists. Further research into the factors that affect flourishing could provide useful information in counteracting the sub-par flourishing levels experienced by teachers.

Individuals who scored high on flourishing (compared to those who scored low) experienced their work environment to be significantly more respectful, supportive, caring, meaningful, inspirational, and forgiving. Positive practices had a statistically significant effect on workplace flourishing, explaining 16% (medium effect) of its variance. In terms of specific positive practices, meaning explained the most variance in workplace flourishing (27%, large effect). When teachers find themselves in environments where meaningfulness is emphasised, where they are elevated and renewed by the work that they do, they are destined to flourish. Significant medium effects were found for the remainder of the positive practices, namely support (20%), inspiration (20%), respect (19%), caring (18%), and forgiveness (16%). Therefore, in addition to meaning, the flourishing levels of teachers (although to a lesser extent) are dependent on schools to create environments where people take interest in and care for one another; where kindness is reflected in acts of support and compassion; where mistakes are forgiven; where people set positive examples and inspire one another; and where respect and appreciation towards one another is freely exhibited. This highlights the importance of schools to be mindful of the organisational practices they embody, as these practices significantly affect the well-being of their employees. Similar to previous studies (Fouché, Rothmann, & Van der Vyver, in press; Rautenbach & Rothmann, in press-c), the three positive practices that had the biggest impact on workplace flourishing were meaning, inspiration, and support.

In conclusion, when employees experience their work environment as respectful, supportive, caring, meaningful, inspirational, and forgiving, they are more likely to experience optimal well-being in the workplace. Furthermore, when employees flourish, they will be less likely to contemplate leaving their current jobs and perform better, both within and beyond the confines of their job descriptions. Therefore, schools should be sensitive to practices they embody, as these practices significantly affect employee well-being.

Needs-supplies fit, flourishing at work, and intention to leave: A longitudinal study

The aim of this study was to investigate relationships between needs-supplies fit, workplace flourishing, and intention to leave using a two-wave cross-lagged panel design.

To date, no research study has focused on the longitudinal analysis of workplace flourishing. This is problematic as workplace flourishing is not a fixed state (Rautenbach & Rothmann, in

press-a). Although some longitudinal studies exist regarding dimensions of person-environment (PE) fit and dimensions of workplace flourishing (De Beer, Rothmann, & Mostert, 2016; Gabriel, Diefendorff, Chandler, Moran, & Greguras, 2014; Lu, Wang, Lu, Du, & Bakker, 2014), none of these studies have taken into consideration the multidimensionality of work-related well-being. Ill consideration of the multidimensionality of work-related well-being could be harmful to the long-term health of employees (Porath, Spreitzer, Gibson, & Garnett, 2012). Another research gap is that no previous studies have investigated the relationships between needs-supplies fit, workplace flourishing, and intention to leave. Gaining insight into the most influential causes of employees' intent to leave can assist organisations to adopt more effective retention strategies to retain talented employees. This information could be especially helpful for the educational sector in South Africa, where commonly cited problems include high attrition rates (Steyn, 2006), teacher shortages (Xaba, 2011), and low teacher performance (Jackson & Rothmann, 2006).

Results supported the configural, metric, and scalar invariance of the measuring instruments over time. Furthermore, results showed that the measuring instruments showed good test-retest reliability. Test-retest reliability refers to the reliability coefficient that is obtained through the administration of the same measure to the research participants on two separate occasions, with a minimum time interval of six months (Cascio & Aguinis, 2011). The findings are especially important in context of the FAWS-SF, illustrating its construct validity and test-retest reliability over time. The FAWS-SF seem to successfully address the need for a valid and reliable instrument to measure a model of flourishing versus languishing at work (Dagenais-Desmarais & Savoie, 2012; Rothmann, 2013), not only from a cross-sectional viewpoint, but also longitudinally. This suggests that there is not only a place for a construct such as workplace flourishing, but that it can also add significant value.

In terms of the relationship between needs-supplies fit and workplace flourishing, results suggest a significant causal relationship. When employees feel that the organisation attends to their needs, it will not only predict their emotional, psychological, and social well-being, but also cause it. When employees feel that organisations' reward and recognition systems cater for their needs (e.g. need for competence, need for learning and development), they will derive a greater sense of enjoyment from their job, experience frequent positive affect, feel engaged, and feel socially included within the organisation, among other things. This is in line with numerous theories. Cognitive appraisal theories of emotion (Roseman et al., 1990;

Scherer, 1999) support the notion that perceived fit precedes affective reactions, suggesting that affective responses such as emotional work engagement and positive affect occur as a result of high levels of perceived fit. When focusing on the needs of employees, Cable and DeRue's (2002) PE fit model and Locke's (1976) range of affect theory suggest that need fulfilment, which is experienced by the congruence between employee needs and what the job has to offer (supplies), leads to job satisfaction. The theory of work adjustment (TWA; Dawis & Lofquist, 1984) also emphasises the importance of person-environment congruence for experiencing job satisfaction (element of EWB).

Although no comparisons could be made to previous studies with regard to needs-supplies fit and workplace flourishing from a longitudinal perspective, the current study was somewhat consistent with that of Gabriel et al. (2014) in terms of temporal precedence. In their study, they examined the relationships between work affect and job satisfaction (elements of EWB) and perceptions of PE fit (PO fit and PJ fit) among administrative personnel at a tertiary institution. They discovered that PE fit predominantly predicted affect (job satisfaction and positive affect) at both levels of analysis, although some relationships exhibited reciprocal causality (PO fit and job satisfaction), and others supported affect as an antecedent of PE fit perceptions (positive affect and negative affect on person-job fit).

However, the results of the current study differed from those of previous studies. For example, in a study within a technological firm in China, Lu et al. (2014) found that work engagement (element of PWB) caused person-job fit via job crafting. They, however, failed to test bidirectional relationships between work engagement and person-job fit, which posed the question of which variable has the largest impact on the other over time. Aiming to address this issue, De Beer et al. (2016) examined bidirectional relationships between work engagement and person-job fit across various industries in South Africa. Consistent with Lu et al. (2014), their results indicated that work engagement is a stronger predictor of person-job fit over time, while person-job fit as predictor of work engagement received practically no support. Therefore, based on the results of the current study, as well as previous studies, the relationship between elements of PE fit and workplace flourishing remain inconclusive and complex.

In terms of the impact of needs-supplies fit and workplace flourishing on intention to leave, the study did not yield significant results. Even though NS fit and workplace flourishing are

important predictors of intention to leave from a cross-sectional viewpoint (Redelinguys et al., in press), NS fit and workplace flourishing did not cause intention to leave in the current sample. In contrast to the current study, numerous theories suggest that the combination of fit and flourishing has an impact on intention to leave and actual turnover. The TWA (Dawis & Lofquist, 1984) and job embeddedness theory (Mitchell et al., 2001) suggest that when congruence is achieved between employees and their work environment, and when employees establish meaningful relationships in the workplace, they will experience increased satisfaction, which will subsequently affect their turnover decisions. Similarly, the attraction-selection-attrition (ASA) model (Schneider, 1987) suggests that employees are attracted to, and remain within, organisations with which they share similar preferences, as this allows them to achieve their goals.

The inability to establish a causal relationship with intention to leave in the current study suggests that other factors in addition to needs-supplies fit and workplace flourishing could help to explain how these factors relate to one another. The TWA (Dawis & Lofquist, 1984) suggests that in the case of need dissatisfaction, employees will engage in active or reactive adjustment behaviours in an attempt to satisfy their needs. Therefore, job crafting could be applicable to the current context, as employees are capable of initiating action and building resources to construct their desired workplace (Bakker, 2010). Job crafting refers to the initiative taken by employees to change various aspects of their jobs, for example changing the manner in which they perform tasks (Tims, Derks, & Bakker, 2016). When employees perceive low fit and work-related well-being, self-initiated actions could assist employees to create their desired workplace which could alter their perceptions of fit and well-being, and subsequently turnover decisions.

Another factor that could be considered is perceived employment opportunities. Predominantly, turnover researchers have emphasised two important variables (job satisfaction and perceived job alternatives) in an attempt to understand voluntary employee turnover (Hulin, Roznowski, & Hachiya, 1985). Mobley's (1977) model of employee turnover suggests that job dissatisfaction leads to three linear cognitive evaluations: 1) initial thoughts of leaving; 2) comparing the current job with other job alternatives; and 3) intention to leave the organisation. Their model, as well as other models (e.g. Lee & Mitchell, 1994; Wheeler, Buckley, Halbesleben, Brouer, & Ferris, 2005; Wheeler, Gallagher, Brouer, &

Sablynski, 2007), emphasises the importance of viable alternative job alternatives and perceived job mobility in making turnover decisions.

In conclusion, when teachers feel that their needs are attended to, they will experience elevated levels of work-related well-being. Therefore, management and employees should actively strive to satisfy each other's realistic expectations, as employees (in terms of well-being) and schools (in terms of the outcomes of employee well-being) are affected equally by this interaction.

5.2 Integration and Contribution of this Study

This study made the following contributions to the field of Industrial/Organisational Psychology.

Firstly, it resulted in the further validation of an instrument that measures flourishing versus languishing in the workplace, both from a cross-sectional and longitudinal viewpoint.

Secondly, it resulted in the discovery of a new antecedent of workplace flourishing, namely person-environment (PE) fit.

Thirdly, it resulted in the first discovery of outcomes (intention to leave, in-role performance, and OCB) related to flourishing at work as modelled by Rautenbach and Rothmann (in press-a).

Fourthly, it resulted in more comprehensive information regarding the impact of positive practices on workplace flourishing.

Fifthly, it resulted in the first longitudinal study that measures needs-supplies fit, workplace flourishing, and intention to leave.

5.3 Limitations

Firstly, various geographical, occupational, and sectorial restrictions were placed on the sample of the study. This study was conducted on a specific sample of academic personnel in a specific district within Gauteng. Therefore, the generalisation of findings to other contexts should be done cautiously.

Secondly, due to the cross-sectional design of the first two articles, the causal relationship between all the variables of the study in relation to workplace flourishing could not be determined. More research is needed to explain how the study variables influence one another over an extended period of time.

Thirdly, the study made use of self-reported measures, which may have led to “common method variance”. Some authors (Haefel & Howard, 2010) have, however, expressed their disappointment with the prevalent tendency to list self-reported measures as a limitation, especially as employees are in the most suitable position to accurately report on work-related aspects (Frese & Zapf, 1999).

Fourthly, the relatively small sample size hindered the examination of workplace flourishing and positive practices from a multilevel perspective. More research is needed regarding the effect of the full spectrum of positive practices on workplace flourishing from a multilevel perspective.

Fifthly, only a handful of outcomes and antecedents were assessed in relation to workplace flourishing. More research is needed to expand its thin, yet promising literature base.

Sixthly, the current study only assessed the PO fit, DA fit, and NS fit in relation to the study variables. More research is needed regarding the effect of interpersonal aspects of fit (e.g. person-group fit, person-supervisor fit) on workplace flourishing.

Lastly, the longitudinal part of the study only included two waves of data. Including more than two waves of data could even more accurately explain how the constructs relate over time.

5.4 Recommendations

Regardless of the limitations of this study, the present findings have important implications for practice and future research.

5.4.1 Recommendations to Solve the Research Problems

In order to ensure the retention and performance of employees, schools should direct their attention to four specific areas.

Firstly, it is imperative for schools to comprehend the impact of PE fit on the work-related well-being and other outcomes of employees as all role players are affected equally by its implications. Proactively, in the recruitment and selection process of teachers, schools should incorporate PE fit as one of the critical parts of the selection criteria against which candidates are assessed. Positive outcomes will ensue when the right candidates are selected in congruence with the school's values and offerings.

Secondly, as needs-supplies fit affect employee well-being, it is vital for the school's management and employees to clarify their expectations of one another. Management and employees should actively strive to satisfy each other's realistic expectations, as employees (in terms of well-being) and schools (in terms of the outcomes of employee well-being) are affected equally by this interaction. Open, honest, and frequent discussions can ensure that both parties are aware of the needs and expectations of the other party. Once awareness is raised, both parties can more purposefully and constructively work towards finding solutions to address the experienced inadequacies.

Thirdly, from an organisational level, schools should strive to create a culture where management, employees, and learners exhibit mutual respect, support, care, and forgiveness towards one another – a culture where employees are elevated and renewed by the work that they do, enabling them to lead by example and inspire others. When such a culture is institutionalised, it should lay the foundation for optimal health and performance in the workplace.

Fourthly, schools should also strive to create an inclusive environment where employees feel a sense of belonging and integration, an environment where employees feel their needs are attended to, and an environment that fosters factors such as learning, individual expression, and positivity. When such an environment is created, teachers should be healthy at work, productive, loyal, and go beyond what is expected of them; thus creating the best possible scenario for the individual (teacher), the school, and the learners. Therefore, schools should invest a considerable amount of time, energy, and money (if possible) in attending to the holistic wellness of their employees to ensure their retention and performance. As human resources form the core business of schools, schools could explore the possibility of implementing basic employee assistance programmes (EAPs). EAPs may help to identify employees at risk, so that interventions can be directed at them on an individual level.

5.3.2 Recommendations for Future Research

Future studies should strive to:

- Expand the assessment of workplace flourishing to other occupations, sectors, and geographical locations.
- Assess additional antecedents and outcomes related to workplace flourishing, to broaden its thin, yet promising literature base.
- Assess the relationship between positive practices, workplace flourishing, and other variables from a multilevel perspective.
- Assess the relationship between interpersonal aspects of fit (e.g. person-group fit and person-supervisor fit) and workplace flourishing.
- Enhance the quantity of longitudinal studies focusing on the flourishing of employees in the workplace.
- Include more than two waves of data in the longitudinal analysis of constructs.
- Assess factors such as job crafting and perceived employment opportunities in relation to fit, flourishing, and intention to leave.

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